

45
28,923
82,591
63,205
38,524
01,119
10,581
96,020

21,966
99,762
77,694
96,524
65,573
22,664
52,797
27,137
69,779
17,879

15,476
56,193
78,368
12,888
17,544
89,608

41,838
58,086
56,179
39,841
60,936
70,377
21,315
69,244
78,905
45,911
10,036
22,958

79.0

5
28,945

94,390
12,645
23,941
02,171
91,032
24,179

59,940
33,015
27,346
27,161
16,961
44,199
65,580
13,040
34,366
44,326

97,440
05,085
82,645
44,058
15,344
75,100

67,562
85,631
16,617
07,562
04,917
07,052
71,108
26,757
02,645
59,140
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98,199

59.3

months

3, 1947

JAN 29 1947

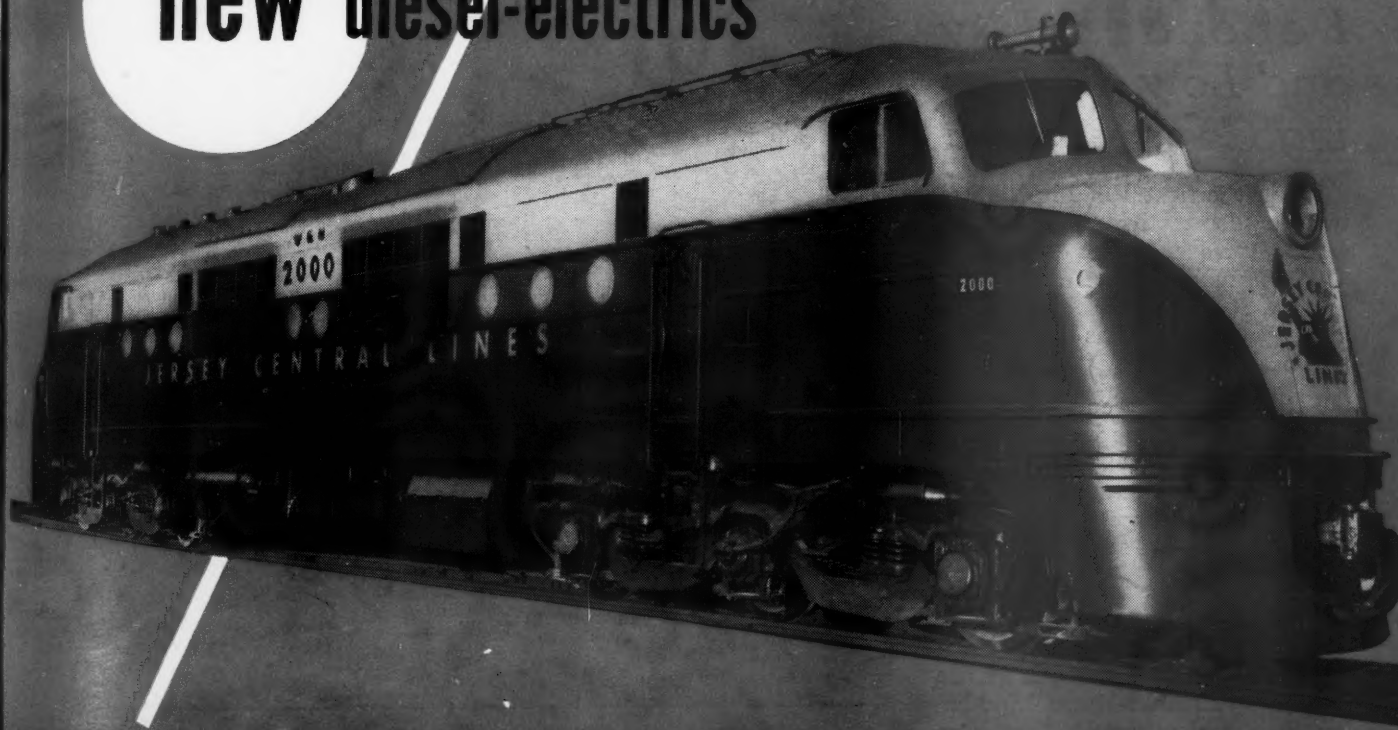
JANUARY 25, 1947

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Railway Age

Founded in 1856

new diesel-electrics



2000-hp DOUBLE-ENDED locomotives for commuter service

BALDWIN

OFFERS A COMPLETE LINE OF
DIESEL-ELECTRIC LOCOMOTIVES

660-hp switching locomotives • 1000-hp switching locomotives • 1500-hp switching locomotives • 1500-hp general purpose locomotives • 2000-hp heavy switching and transfer locomotives • 1500-hp, 2000-hp and 3000-hp single cab locomotives which can be operated as single units or combined for multiple unit operation.

Something new in diesel-electric practice is this 2000-hp *double-ended* locomotive built for Jersey Central Lines.

Single Units of this type—that can be operated in either direction without the necessity of turning at terminals—may be the answer to a motive power problem on your road. May we discuss it with you?

The Baldwin Locomotive Works, Philadelphia 42, Pa., U. S. A. Offices: Philadelphia, New York, Chicago, St. Louis, Washington, Boston, San Francisco, Cleveland, Detroit, Pittsburgh, Houston, Birmingham, Norfolk, Seattle.

BALDWIN
LOCOMOTIVES

Fairbanks-Morse



ELEVEN FAIRBANKS-MORSE DIESEL SWITCHERS TO MILWAUKEE ROAD

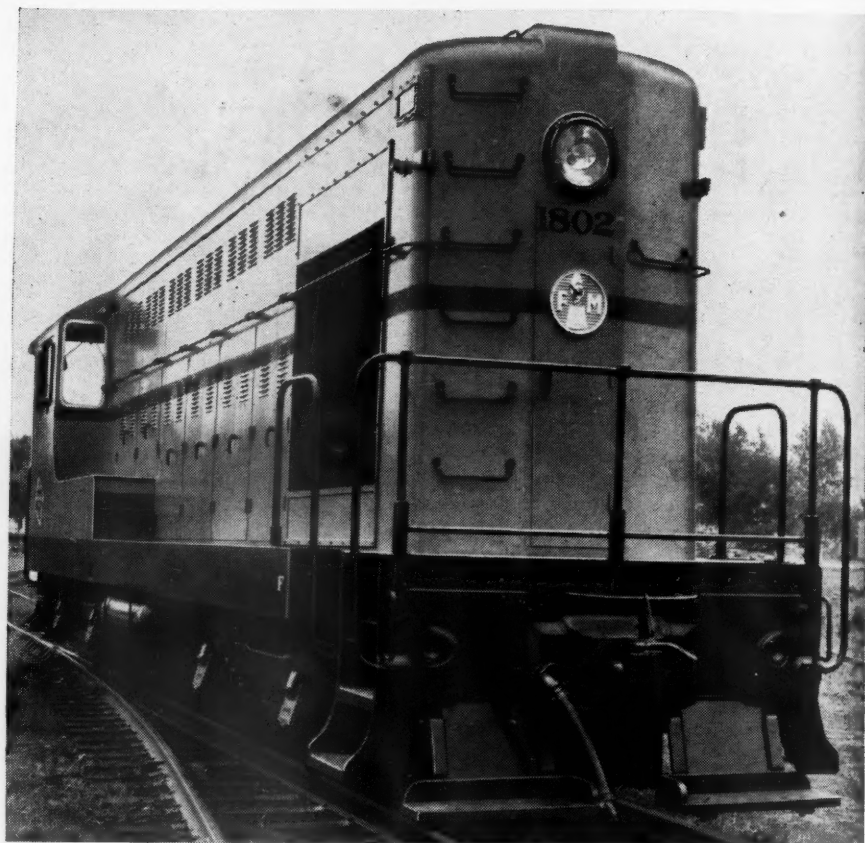
Received Delivery on First One 2½ Years Ago; Have Dependability and Low Operating Costs

When the first 1,000-hp. diesel switching locomotive made by Fairbanks, Morse & Co. was delivered to The Milwaukee Road (Chicago, Milwaukee, St. Paul & Pacific R.R. Co.) in August, 1944, it was largely on a trial basis.

Fairbanks-Morse engineers were satisfied with its basic design and were confident that it would stand up well under service, but actual performance records were yet to prove what it could do under all types of service conditions.

Proof of its performance during the 2½ years since it was put into service lies in the fact that The Milwaukee Road officials have placed in service 10 more Fairbanks-Morse 1,000-hp. switchers and, although they have been in service only a relatively short time, their performance has been equally satisfactory.

The Fairbanks-Morse Diesel locomotives differ from other makes in design of engine. The 1,000-hp. switcher has a vertical, 6-cylinder, 2-stroke cycle, opposed-piston diesel engine in which all exhaust and air inlet valves, as well as cylinder heads, are eliminated. Two pistons operate in each cylinder and move in opposite directions as a result of a central explosion. The pistons are of trunk type, semi-steel, cooled internally with lubricating oil and equipped with cast iron piston rings.



The switcher is of standard width and height and its length, inside knuckles, is 51 feet. It has 4 pairs of drivers with an 8-foot rigid wheel base of each truck. Weight on drivers when loaded and ready for service is 240,000 lbs. Its maximum continuous tractive effort is 34,600 lbs. and its maximum speed restriction is 60 mph.

The 1,000-hp. switcher can carry 750 gallons of fuel oil, 140 gallons lubricating oil, 100 gallons engine cooling water and 28 cu. ft. of sand.

Back of the performance records of the 11 diesel switchers in service on The Milwaukee Road and in all Fair-

banks-Morse Diesel locomotives is one fact. That is they are put through such thorough tests and are so carefully inspected before leaving the factory that they are operated with an absolute minimum of maintenance and time lost in servicing them.

The simplified engine design with cylinders positioned vertically makes possible an engine shape that fits conveniently into a locomotive cab. It makes good use of available headroom, and is narrow enough to leave unusually wide aisles on each side—a fact that is appreciated by operating crews and maintenance men. Fairbanks-Morse: a name worth remembering.

Railway Age

With which are incorporated the Railway Review, the Railway Gazette, and the Railway Age-Gazette. Name registered in U. S. Patent Office.

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January 25, 1947

No. 4

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1947..

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RAILWAY AGE

Unity and Foresight Needed in Formulating Industry Policy

The member roads of the Association of American Railroads will meet in Chicago on January 31 under circumstances which are probably as critical as the industry has ever faced. It is highly important that those in attendance realize the dangers and the promise of the times, so that their thought and action may rise to the high plane on which events are moving. No doubt about it—the decisions reached on industry policy during the next few months, or the failure to reach any conclusive decisions at all, will determine the future of the industry, and quite likely whether or not it is to survive as private enterprise. The time for temporizing has passed.

The experience of the war, and the persistence of shortages in railroad service in peace-time, (1) have proved to the American people the necessity of adequate railroad service to their safety and prosperity; and (2) suggest the danger that, one of these days, the public might decide that it cannot depend upon getting adequate service from private enterprise. If it should reach that conclusion, nothing could be more certain than that it would expect the government to supply the deficiency. Consequently, there is no greater need on the part of the railroads than that they should at once do everything in their power to remove all doubt about the future ability of the industry to finance itself adequately from private investment funds.

Prospects for the Short Term

Railroad managements know—but dependable opinion research has conclusively shown that the public and railroad employees do not know—that railroad earnings in 1946, as well as throughout the 1930's, were insufficient to assure the steady flow of new capital needed to keep railroad service abreast of actual and potential demand. Railroad managements also know that 1947 earnings quite likely *may* be insufficient for this purpose. They know that future railroad earnings unquestionably will be inadequate, if all the present plans for government provision of tax-free and toll-free highways and waterways and aids to air transportation are consummated; if the railway unions are successful in securing the additional "featherbed" rules they have indicated they will demand; and if the regulatory authorities repeat their 1946 tardiness in allowing the level of railway charges to reflect changes in costs of the service.

The railroads will have the funds to press forward with a large program of improvements this year, and possibly for a while longer. Railroad managements certainly know, however, (a) that no program of improvements and expansion will adequately meet the nation's need for railroad service either for high-level peace-time production or for a future military emergency unless it surpasses the 1923-30 program, when expenditures for additions and betterments averaged \$843 million a year; and (b) that no such program can be sustained over a term of years by the investment of private capital, with railroad stocks averaging at discounts of from one-third to one-half under par. They know further that low prices of stocks must inevitably persist so long as the political threats to railroad earnings, mentioned in the preceding paragraph, continue.

No Peace-time Miracles

The railroads' imperative need, therefore, is for a program of public information which will explain, in terms of the public's own interest and understanding, the essential change in political policy toward the industry—without which neither the industry's earnings nor the price of its equity securities can be restored to a satisfactory basis—which is necessary if improvements and expansion are to be provided in adequate volume by private investment.

The need for such a program of education has existed for a long time but not until now has its chance for success appeared so bright, nor the fatal consequences of further delay in embarking upon it been so evident. In the 1930's it was difficult to arouse anybody, including railroad men themselves, to concern over the possible inadequacy of railroad facilities, but that obstacle has now vanished. The railroads got through the war by the amazing productivity of the device which might be called the "Gormley miracle"—which is, however, far less successful in peace-time.

If capitalism is going to continue in this country, then nothing could be more certain than that the level of production and traffic of 1940 or 1941 is not going to return, but, rather, that traffic within another year or so may exceed that of the war-time peak, as happened quickly after World War I. This means that the railroads face the probability that they will be called upon for a long-sustained program of capital improvements.

It is inconceivable that either military authorities or shippers would tolerate the lack of such a program if the present level of traffic continues or increases. If private capital will not finance such a program, public capital must. Since private capital cannot accept this assignment on an adequate scale until the public learns enough of the political obstacles in the way of private financing of the railways to insist that these obstacles be removed, it follows that getting this information to the public becomes the foremost duty of the organized railroad industry.

Basis for Agreement Exists

There is not the space here, nor would it be appropriate, to attempt to outline comprehensively the details of such a program. There are, however, some important conclusions regarding the problem as a whole which should be reasonably clear to anyone who has followed this aspect of the railroads' strategy as closely as this paper has. These may be enumerated as follows:

1. At such a time as this, when all the energy and skill of which railway managements are capable are imperatively needed to combat the forces inimical to private operation of the railroads, it is tragic folly for energy and brains to be wasted upon quarrels within the industry.

2. There is, actually, insufficient ground for disruptive disagreement between the two principal opposing "schools" of thought on railroad public relations policy, because each of these opposing schools is right except in insisting that the opposing school is hopelessly wrong. The two dominant attitudes toward public relations efforts of the railways are (a) that which would have the industry continue its good-will-building program as it has for the past decade, avoiding controversial issues lest some of this good will be dissipated; and (b) that which would limit the industry's publicity and advertising to militant promotion of specific objectives. The "militant" school is right in that there is no point in continuing the good-will-building program which the Association of American Railroads has pursued in the past, if the public esteem thus expensively created is never to be drawn on to get some concrete improvement in the political conditions under which the railroads operate. This paper has time and again criticized the apparent pointlessness of the A. A. R. program, and we welcome the growing insistence that now, finally, some effort be made to translate the known friendliness of the public for the railroads into specific action.

At the same time, however, militancy in behalf of the political reforms needed for a sound economic environment for the railroads certainly does not justify the abandonment of good-will-building advertising and publicity. The "pacific" school is right in its estimate of the importance of this program. Railroad advertising is not to be criticized for making known the merits of the "flanged wheel on the steel rail"—but, once having gained acceptance of that important fact, for failing to tell the public what is necessary to keep the wheels running on those rails.

3. The central objective of all public relations effort—as, indeed, of every effort of management—should be to secure net earnings adequate to provide dividends, both actual and in prospect, sufficient to keep railroad

common stocks selling at par or more on the stock exchange. The common stockholders are the "residual claimants" to railroad revenue. They cannot "get theirs" until the prior claims of labor, of suppliers of materials, of the tax collector, and of debtors have been fully satisfied. But merely satisfying these prior claimants—which has seemed at times to be about all much of the railroad industry has been intent on doing—will never reestablish the railroads as independent free enterprise. This paper has again and again called attention to the central role of the stockholder and his income in any consideration of the railroads as private enterprise (e. g., in the editorial "The Railroads' Forgotten Man" in our February 20, 1943, issue). In the five years 1941-1945, railroad stockholders received as dividends an average of \$219 million per year—or less than half of their average return in the years 1926-30, when the annual gross business done by the railroads averaged 25 per cent or \$2 billion less than in 1941-45, and when average investment in road and equipment was \$1½ billion less than in 1941-45.

Owners Are Entitled to Unified Policy

No program which the railroads may have regarding public relations, or anything else for that matter, will have any effect toward keeping this industry in the category of self-supporting private enterprise, unless it promises to make some tangible contribution toward treating the industry's stockholders a great deal better than they have been treated in the past 16 years. Those who are inclined to criticize the activities of R. R. Young in seeking to organize stockholders into an independent association should not be surprised that he gains recruits if the standard organization of the industry fails to make it clear that it is just as deeply concerned for the welfare of this "forgotten man" as Mr. Young is.

This subject of public policy is as big as it is important, and even this long essay touches only a few of the more salient points at issue. It does not seem unreasonable to hope, however, if the members of the Association of American Railroads will reflect fully upon the matters mentioned here, that they may be able to achieve substantial agreement on what the general outline of the industry's policy toward public relations should be. When it comes to putting such a general policy, once it can be agreed upon, into specific terms, there is no reasonable occasion for disagreement, because techniques of opinion analysis and of testing "copy" in advance of its actual use are available which, if employed, remove such questions from the realm of controversy. The situation calls for cool heads, and also for long ones. There are plenty of both in the railroad industry, if they can turn their attention long enough from their more immediate concerns to give this complex and vexing problem the benefit of their counsel.

The Byrd expedition to the Antarctic ordered a carload (30 tons) of Lackawanna anthracite, which had to be delivered on short notice to a ship being loaded at Beaumont, Tex. So the coal was loaded in a box car and was handled in merchandise trains. The freight rate paid was \$15.755 per ton. Before this railroad handling was arranged, expedition authorities got a quotation on what the movement would cost by air freight. The rate quoted for the Scranton-Beaumont haul was \$400 per ton, more than 25 times the railroad rate.

The Geneva Experiment

Independent announcement on January 10 by individual Western roads of their intention to publish commercial rates on iron and steel articles on the same basis as the war-time rates for the government between Geneva, Utah, and points in the Pacific coast area is a development of importance in the geographical distribution of industry in the country. Of even greater significance, it furnishes concrete evidence that the Western railroads do not conspire to "keep the West down industrially," as some rate politicians have asserted. It also demonstrates that the "conference method" of rate-making does not inhibit independent action by individual roads when independence seems the better course to them.

The proposed rates are intended to make it possible for the new private owner of the war-time government steel plant at Geneva, Utah, to compete effectively in Pacific coast consuming areas with steel from other sources. During the war the production of the government plant moved at special low rates granted on memorandum under section 22 of the Interstate Commerce Act. Since these rates were not applicable to the private corporation which purchased the Geneva facilities this year, and rates other than what the shippers term impractical "paper" charges did not exist, the railroads were asked to come forth with a commercial rate comparable to that accorded the government.

Complex Considerations

After extensive discussions, the interested carriers failed to agree upon a joint basis of rates, and, at a meeting in Chicago on January 10, a majority of them concluded to postpone action on the grounds that conditions are "uncertain", that the cost of railroad operation is increasing; and that the entire subject of intercoastal and transcontinental rates will shortly be investigated by the Interstate Commerce Commission at the behest of coastal steamship operators. Since traffic moving by rail from Geneva westward would compete very largely with steel shipped by water from East coast mills, the latter consideration is of particular importance.

A minority thought otherwise, however, and the same day announced independently that they would publish rates designed to move the traffic. The Western Pacific and the Denver & Rio Grande Western filed notice of intent to publish a rate of 48 cents per 100 lb., minimum carload weight 80,000 lb., from Geneva to San Francisco (Cal.) bay cities and intermediate points, via their route. This proposed rate is the same as that accorded the government (40 cents) plus a 20 per cent (8 cents) increase reflecting the general increases in Ex Parte 148 and 162. At the same time the Union Pacific will publish the same rate to the Los Angeles (Cal.) area and to Portland, Ore., and a rate of 54 cents to Seattle, Wash., via its lines. The same rates will be offered by the Western Pacific and Great Northern to Portland and Seattle by their route. Both rates are 22 cents per 100 lb. less than existing commercial rates in effect.

The Southern Pacific and the Atchison, Topeka & Santa Fe, which are in a position to compete directly between Geneva and all destination points named except Seattle, announced that they would not participate in

this reduction for the present. Neither of these roads participated in the section 22 rate allowed the government.

The effective date of the new rates has not yet been announced by the roads or their tariff publishing agencies on the West coast. Shippers already have asked for comparable reductions from Chicago and other points east of Geneva to the Pacific coast so they may compete effectively with the Geneva plant. Similarly, shippers serving the Pacific coast market by intercoastal water haul, and fabricating plants on the coast, have asked for drastic reductions on steel eastbound from Pacific coast ports. The Kaiser plant at Fontana, Cal., seeks compensatory low rates on raw materials from Utah to equalize its costs with Geneva relative to the Coast market. The roads are holding in abeyance action on these requests for active consideration after the westbound rates from Geneva become effective.

Traffic and Rates Evolve Together

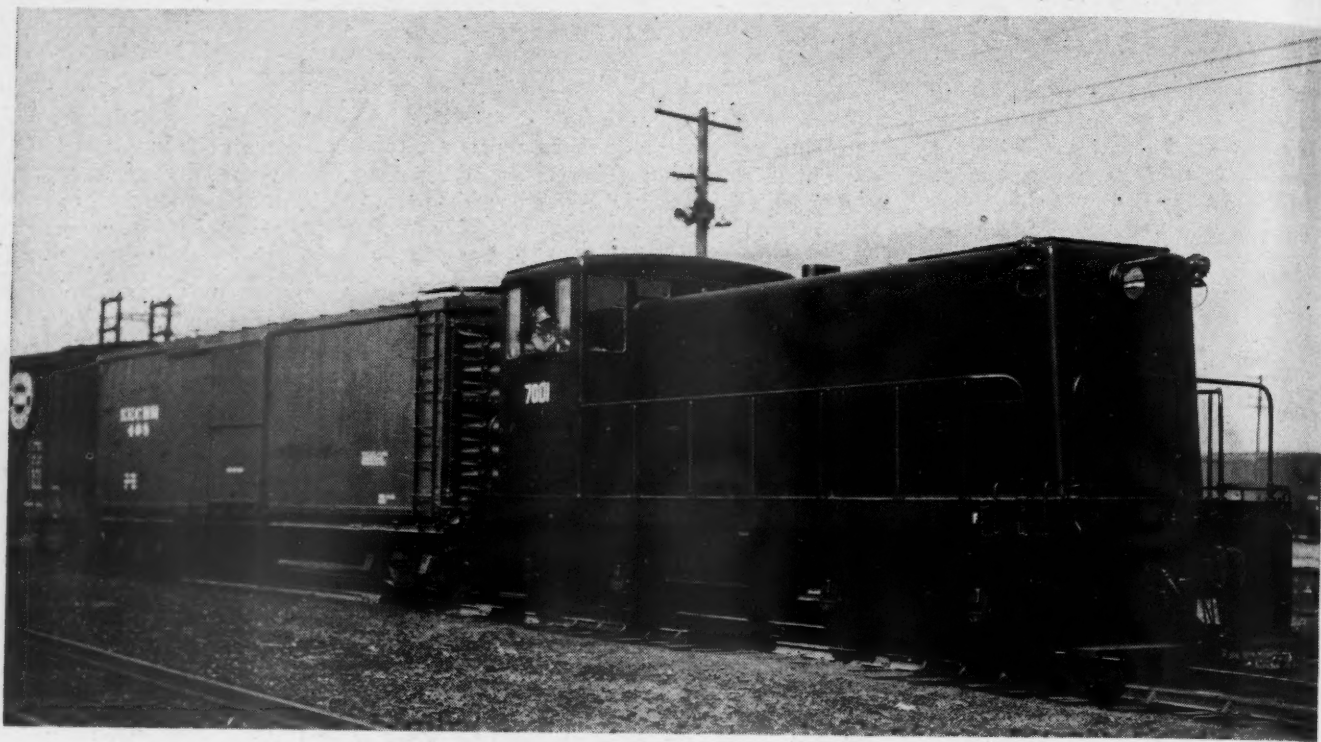
The peace-time production of steel in Utah for widely scattered markets is a brand-new development in a business which, because of the importance of location relative to coal and ore, heavy capitalization and need for cheap, high-capacity transport routes, tends to become deeply channelized. When so many conflicting interests and considerations enter into the establishment of a rate, it is axiomatic that the rate is in the nature of an experiment. The participating carriers must determine whether they will gain more by the new traffic than they will lose. For competitive reasons, they are under pressure to grant comparable rates for other markets and other shippers. They must make certain that the new rate is compensatory.

It is only by experiment, however, that they can find out whether the new traffic will grow to profitable proportions. The carriers participating in the new rates have demonstrated that they are willing to take the chance. There lies in the Geneva case a parable for "the anti-trust boys": Traffic and rates evolve together. There can be no force-feeding of the first by unwise tampering with the second. Contrariwise, no sane railroad management discriminates against the industrial growth of the area it serves by rate "block-outs." When the time is ripe for an experiment, the carriers seek the answer in the laboratory of rate-making, as they have done since the day of the "Stourbridge Lion." The Geneva case is but the latest page in the extensive archives of the rate-makers' contributions to the economy.

Nonsense About Trains

We cannot believe that the gaudy promises which foretell tomorrow's rail travel in terms of baronial magnificence will do anything but a substantial injury to the carriers and to the good will in which they are held by a somewhat impressionable public. Certainly, nothing can do any industry a greater disservice than promises unfulfilled, and the railroads have no chance in the world of fulfilling a tenth of the promises being made in their names by irresponsible propagandists in the popular prints who forecast the least overland journey of tomorrow in surroundings that would make Cecil de Mille cringe at their cost and impracticability.

—The New York Herald-Tribune

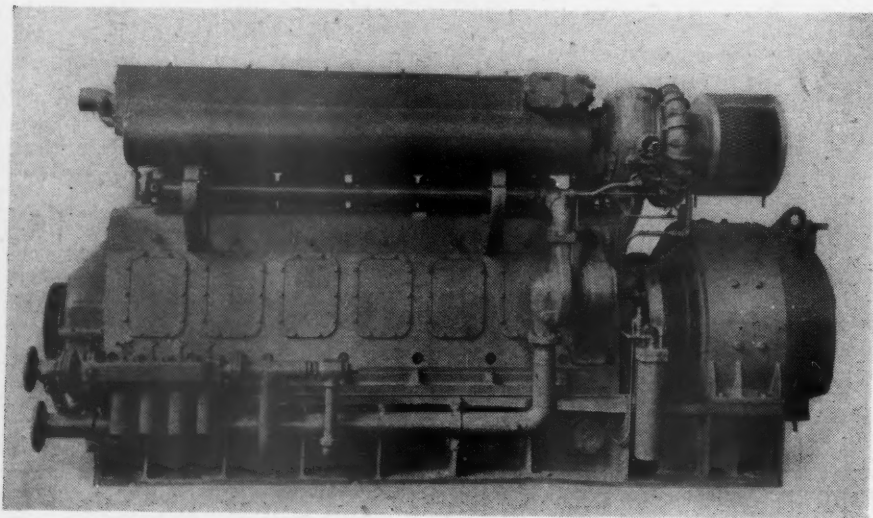


Alco-G.E. 70-Ton Diesel Locomotive

Unit powered with a 660-hp. engine is designed for freight, mixed train and yard service and is suitable for use on lines having a light roadbed with track and bridge limitations

A 70-ton, 660-hp. Diesel-electric locomotive, built by the American Locomotive Company and the General Electric Company, is now finding ap-

By P. M. GILLILAN
Transportation Divisions,
General Electric Company



The Cooper-Bessemer engine is rated 660 hp. at 1,000 r.p.m.

plication on railroads in the United States and Canada, in light freight, mixed train and yard service. In addition to its low first cost, reduced maintenance, and attractive saving in fuel costs, it is particularly adaptable for use on lines having a light roadbed and where the track and bridge limitations require a locomotive of low axle weight.

The single, heavy duty, four-cycle, 660-hp. Diesel engine is direct-connected through a flexible coupling to a railway-type generator. Each of the four axles is driven by a light-weight, high-capacity single-gear motor, specifically designed for this locomotive. Battery charging is done at all engine speeds,

Table I—Principal, Weights, Ratings and Dimensions of 70-Ton Diesel-Electric Locomotive

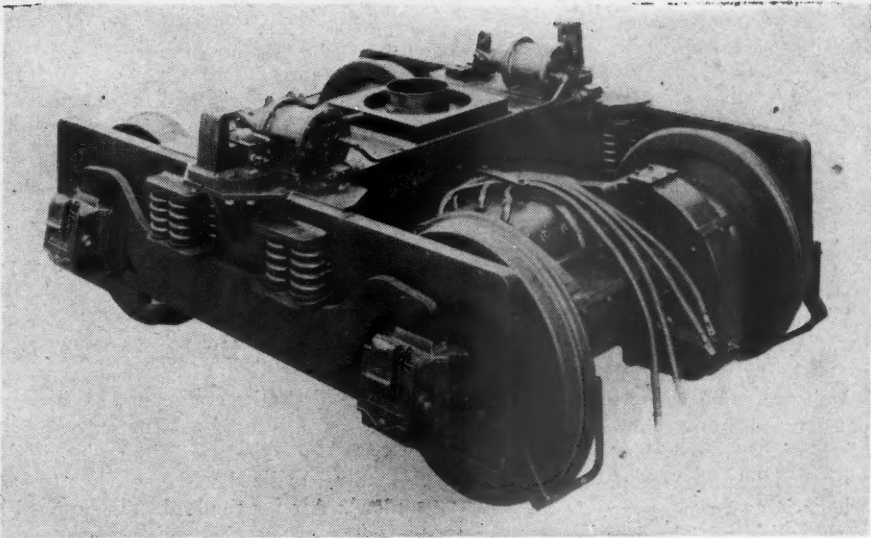
Weight maximum, lb.	139,000
Weight per driving axle, lb.	34,750
Length inside knuckles, ft.-in.	37-0
Width over-all, ft.-in.	10-0
Height over-all, ft.-in.	13-5½
Rigid wheelbase, ft.-in.	6-10
Wheel diameter, in.	36
Tractive force, continuous, lb.	23,600
Speed, continuous rating, m.p.h.	7.6
Maximum tractive force, 30 per cent adhesion, lb.	41,700
Maximum speed, m.p.h.	55

including idling, and the air compressor has high capacity. The locomotive is of sturdy all-welded mechanical construction and equipment is arranged for easy maintenance. In yard service, it is estimated this locomotive can be operated at \$3.10 per hour.

Construction Features

The locomotive has two four-wheel swivel trucks and an operating compartment cab on one end. The light weight is 132,800 lb. and the maximum weight in full working order is 139,000 lb. It complies with I.C.C. regulations covering hand rails, steps, safety appliances, headlights, clearances, etc., and is adapted to both road and yard service.

The cab, frame, center sills and bolsters are built from rolled carbon-steel sheets, plates and shapes by arc welding. The operating compartment has two doors giving access to the front and rear of the locomotive, and has safety glass windows in both sides and ends. The roof and exterior sides are lined with a layer of heat-insulating material and



Truck frames are built of steel plates and shapes fabricated by arc welding

sheet steel and the floor is tight and wear resisting. The engine hood has

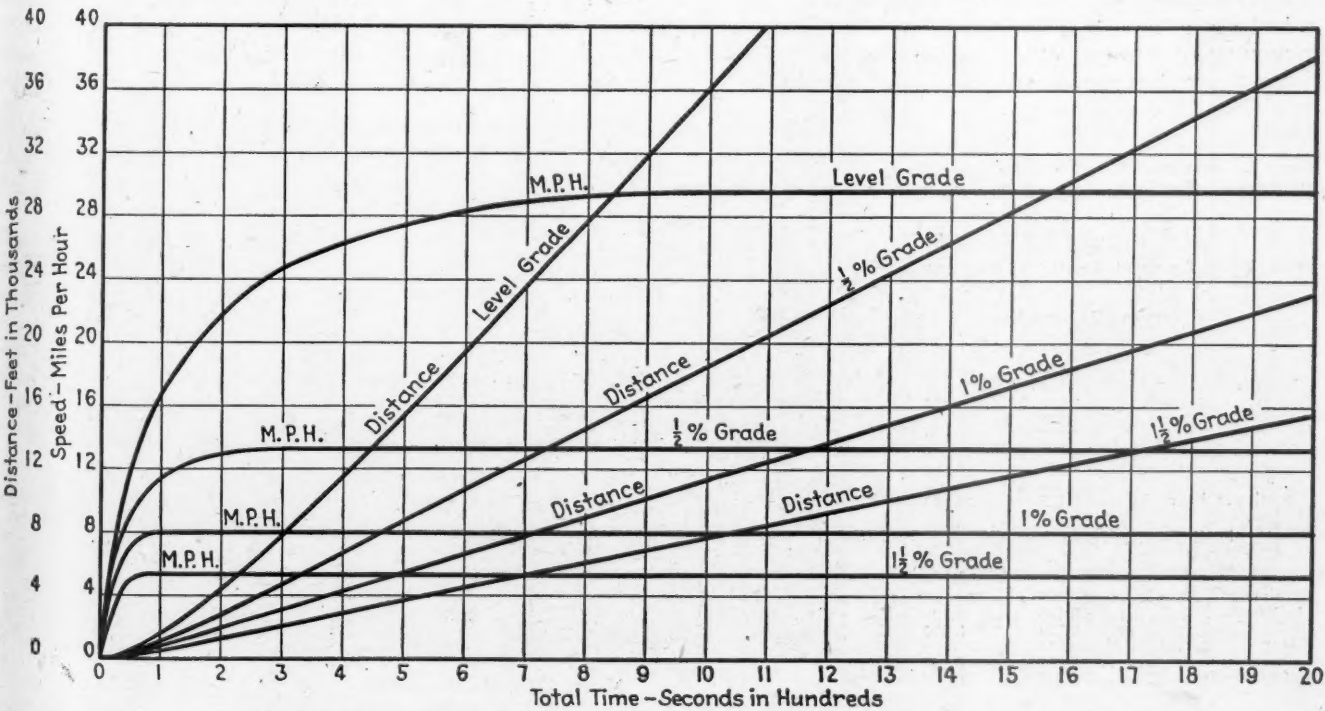
doors that give access to the engine, generator and accessories from the platform on both sides of the locomotive. There are two roof hatches: one furnishes access to the top of the engine and permits removal of the cylinders for inspection and repair; the other is over the engine radiator and fan, and is automatically operated by thermostatic control to regulate the cooling air. The engine hood is bolted in place and can be easily removed.

The truck frames are built of steel plates and shapes by arc welding. Hardened steel liners or wear plates are pro-

Table II—Tonnage Rating at Various Speeds

Speed, m. p. h.	Tractive force, lb.	Level	0.5 per cent grade	1.0 per cent grade	1.5 per cent grade	2 per cent grade	2.5 per cent grade
6.2	28,000	3,255	1,456	922	622	513	412
7.5	24,000	2,730	1,240	781	558	430	344
10	18,400	2,120	938	584	414	314	248
15	12,800	1,462	632	386	268	198	152
20	9,600	1,023	458	273	184	132	97
25	7,600	839	348	201	131	89	62
30	6,250	673	271	151	94	60	36
40	4,500	443	166	83	43	20	4
50	3,350	273	88	32	6	...	...

Note: Resistance based on 8.5 lb. per ton. Tonnages do not include weight of locomotive.



Speed-distance curves for the locomotive with a trailing load of 800 tons

vided for the center plates, pedestals and side bearings. The wheels are 36-in. multiple-wear solid rolled steel with A. A. R. standard tread and flange. The trucks are fully equalized with two brake cylinders mounted on each.

Power Plant

The power plant consists of one 660-hp., six-cylinder, 1,000-r.p.m., turbo-charged Cooper-Bessemer Diesel engine and one direct connected G. E. generator. The engine has a particularly heavy crankshaft; it has individual cylinders which are easily removed, and they are constructed to provide excellent water circulation around the head and valves without the use of pressure gaskets. There is an impulse-type fuel pump on each cylinder. The generator is a direct-current shunt-wound, single-bearing unit with a flexible coupling, and can be easily reassembled to the engine because of the ledge mounting of the complete unit. Excitation for the generator field is supplied by an exciter of the differential split-pole type. It is direct-connected to a 3-kw. battery-charging generaor, and the two units as a set are belt-driven from the generator shaft. The characteristics of the main generator and exciter make possible the utilization of the maximum output of the engine over a wide range, and well above 40 m.p.h.

Traction Motors

The four G. E. direct-current series-wound traction motors were specifically designed for this locomotive and operate through single reduction spur gearing. The bearings which suspend the motor to the locomotive axle are friction type and the armature bearings are anti-friction type. A feature of the construction is the total enclosure of the gearing in a single sealed housing. This construction permits the use of oil lubrication and the exclusion of dirt and moisture from the gear case and axle lin-

ings. The pinion end bearing is outside of the pinion, thus assuring even distribution of pressure on the gear teeth. The traction motors can be operated with full or shunt field at a continuous rating of 5,900 lb. tractive force per motor. Cooling air is furnished by a blower belt-driven from the engine shaft. The light motor weight reduces dead weight on the locomotive axle. The motors have the highest horsepower per pound of any built today.

Brakes

The air-brake equipment is the combined straight-and-automatic type with four brake cylinders. The brake rigging is fully equalized with one shoe to each wheel. Air for the brakes is supplied by a water-cooled, belt-driven compressor, adjusted for operation against a reservoir pressure of 140 lb. It has a piston displacement of 150 cu. ft. per min. when operating at a speed corresponding to the full-load speed of the engine.

Control

The control is normally supplied for single-unit operation and consists of a mechanically operated engine throttle, straight-and-automatic EL air brake, reversing controller, sander valve, bell, horn and window wiper controls, engine-starting push button, gage panel and light switches. The locomotive speed is controlled by the throttle lever which regulates the Diesel engine output and is interlocked to the electrical control, both mechanically and electrically. This interlocking establishes the necessary electric circuits for power application to the traction motors and also prevents the reversal of the motors under power. The control of the motors is arranged to automatically change the

connections from four motors series-parallel to all motors in full parallel across the generator, and finally to the same connection with reduced field strength for the higher running speeds.

A wheel-slip relay gives indication to the engineman when the wheels begin to slip. The nominal generated voltage is 500. The motor contactors are in a steel cabinet in the operating cab and the reverser is located in the space between the platform and the operating cab floor. All apparatus, including the battery, is installed for accessibility and ease of maintenance.

Auxiliary Equipment

Auxiliary equipment includes an engine radiator and belt-driven fan with a thermostatically controlled shutter which automatically maintains uniform engine temperature. The fuel tank of 500 gallon capacity carries sufficient fuel for 24 to 48 hours of continuous road operation or 40 to 70 hours in yard service. There is a filler pipe and gage on each side of the locomotive and an emergency fuel shut-off valve which can cut off the fuel supplied to the engine by the motor driven fuel pump. Other equipment consists of a 32-cell battery, two headlights, classification light brackets, cab lights, cab heater, sanders, bell and horn, window wipers, clothes locker, and an upholstered fireman's seat with a base suitable for tool storage.

Battery charge is provided at all speeds by a 74-volt auxiliary generator, which is mounted on a common shaft with the exciter, and is belt-driven from the main generator. The exciter is the split-pole differential type which automatically controls the generator and has an output characteristic which produces full engine utilization for traction under all operating conditions.

Table III—Estimated Operating Cost, Diesel-Electric as Compared with Steam

Yard Service (Cost per hour)		
	Steam	Diesel-Electric
Repairs	\$1.650	\$0.455
Engineman	2.125	2.125
Fuel	1.620	0.364
Water	0.080	
Lubricants	0.025	0.044
Other supplies	0.025	0.015
Enginehouse expense ...	0.450	0.090
Total per hour	\$5.975	\$3.093
Road Service (Cost per mile)		
	Steam	Diesel-Electric
Repairs	\$0.205	\$0.080
Engineman	0.149	0.149
Fuel	0.294	0.097
Water	0.014	
Lubricants	0.006	0.017
Other supplies	0.005	0.003
Enginehouse expense ...	0.050	0.015
Total per mile	\$0.723	\$0.361



Alco's 75,000th locomotive goes to work

The 6,000-h.p. Diesel-electric locomotive, recently completed at the American Locomotive Company's Schenectady shop, is now pulling passenger trains for the Santa Fe between Chicago and the Pacific Coast

The 60th Annual Report of the I.C.C.

Comments on labor troubles and suggests careful appraisal of possibility of avoiding strikes in transportation industry; 17 recommendations for Interstate Commerce Act amendments of Bulwinkle-bill type

WASHINGTON, D. C.

REVIEWING a period wherein "nearly every branch of transportation" was beset with "labor troubles of almost unprecedented magnitude," including the most complete tie-up of railroad operations that had been experienced since 1888, the Interstate Commerce Commission's sixtieth annual report gives prominent place to an expression of the commission's view that "the public interest requires a careful new appraisal of the possibility of avoiding strikes in transportation without unduly trespassing on the rights of contending groups." In leading up to that expression, the report also calls attention to the "far-reaching and profound effects on transportation" of strikes in other industries, such as coal, steel and automobile manufacturing.

Legislative Recommendations

The report, which went to Congress on January 16, is in the usual form, being a 123-page document reviewing commission activities during the period from November 1, 1945, to October 31, 1946. Its 17 legislative recommendations are mainly repeaters from previous reports and from commission presentations to last year's Congress. Thus they embody new calls for enactment of legislation of the Bulwinkle-bill type to amend the act "so as to provide adequate regulation of two or more common carriers or freight forwarders, subject to the act, when they agree upon and act jointly through a bureau, conference, or association in establishing rates, fares, charges, et cetera, subject to the provisions of the act"; and legislation of the expired McLaughlin-type to set up in a new section of the act (20b) permanent provisions, "permitting carriers by railroad as defined in section 20a, which are not in equity receivership or in process of reorganization under section 77 of the Bankruptcy Act, and are not in need of financial reorganization of the character provided under section 77, to make adjustments of their indebtedness, without resort to judicial reorganization under section 77."

Also, the commission recommends amendments to section 25 to give it authority to require railroads "to install and maintain telegraph, telephone, radio, inductive or other wayside or train communication systems intended to promote

safety of railroad operation, and to establish and maintain rules, regulations and practices with respect to the operation of trains intended to promote safety of railroad operation." The report's review of the work of the commission's legislative committee recalls that legislation along these lines was favored by the commission when it was proposed in the previous Congress. A similar proposal (H. R. 283) has been introduced in the present Congress by Representative Price, Democrat of Illinois.

Meanwhile, the commission asks again for extension to carrier associations of its authority to require reports and inspect records, thus giving it that much jurisdiction over the Association of American Railroads, the American Short Line Railroad Association, and like organizations in the motor carrier, waterway and forwarder fields; and for amendments to make section 20(6) "applicable to records of 'persons which directly or indirectly through rental agreements with shippers or otherwise furnish cars to or for use of any carrier by railroad or express company,' subject to Part I."

Then there are the recommendations that the Transportation of Explosives Act be completely rewritten; that the commission be given on a permanent basis the same emergency powers with respect to motor carriers and water carriers that it has with respect to car service of railroads; that section 20a, which relates to securities of carriers, be amended to make it applicable to sleeping-car companies; that section 5(2) be amended to eliminate the requirement that a public hearing shall be held in all merger and acquisition cases "where carriers by railroad are involved"; and that section 3(2) be amended to give the commission authority to prescribe rules for the extension of credit by express companies.

Still other repeaters are the recommendations that Congress remove from commission jurisdiction the extension, acquisition, or operation [as well as the construction or abandonment as already provided] of spur tracks or of electric railways, which are not operated as parts of general steam railroad systems of transportation; that provisions relating to service of notice be modified to ease the commission's work in that respect;

that section 411 be amended to permit a director, officer, employee or agent of a common carrier to have an interest in a freight forwarder upon authorization by the commission, and to provide for the regulation of consolidation and leasing of freight forwarders; that section 222 be amended to provide "a remedy by forfeiture for failure of motor carriers, brokers, etc., to keep records in accordance with regulations prescribed under Part II of the act or failure to file reports prescribed thereunder"; and that the act be amended "by adding new provisions which would make common carriers by motor vehicle and by water and freight forwarders liable for payment of damages to persons injured by them through violations of the act."

Growing Time Confusion

Finally, there is the commission's perennial suggestion that Congress should amend the Standard Time Act so as fully to occupy the legislative field respecting standards of time to be observed throughout the country. The report includes two and one-half pages of discussion and argument in support of this recommendation, the commission noting that state and municipal departures from standard time "have been growing in number and extent." After 28 years under the Standard Time Act, it also says, "the United States is farther from a uniform system of time standards than it has been at any time since the zone system of time standards was adopted in 1883."

The report's discussion of labor troubles gets under way when the commission recalls that its review of last year appraised the post-war domestic transportation situation as one which "abounds in uncertainties." The course of events, it adds, "has shown that this was a substantial understatement," for the "forces pent up during the war began to test their strength as soon as the nation turned its war-time efforts to a normal competitive economy, and were met by resistant forces." And "the effects of these contests for new economic alignments have brought to us, in a number of forms, issues both novel and difficult, and of a complexity rarely, if ever before, equalled."

While the commission recognizes that

the year's level of industrial production "indicates a high order of accomplishment by management and labor in many industries," it nevertheless finds the record "strewn with interruptions of industrial production and of transportation operations which in many instances have been prolonged and costly." Prices for materials and labor, it goes on, "have advanced irregularly but materially, causing widespread uncertainty as to their future course and anxiety as to future repercussions on the part of those who are concerned with the national economy."

Strikes Were Costly

Moreover, production lost by strikes in the automobile and automotive-parts industries "had a serious effect on the business of the motor carriers," while the strikes of bituminous coal miners "necessitated drastic reductions in rail service." The commission disclaims any purpose to pass judgment on the merits of these controversies, but it emphasizes that "costly adjustments of operations by rail, motor, water, and other carriers were necessary while production was at a standstill"; and when it was resumed, "traffic was concentrated in a short period with impairment of efficient and economical use of transportation facilities."

Coming to its discussion of interruptions in transportation, the commission says that "few persons had expected" the eventuation of such a situation as last May's railroad strike by members of the Brotherhood of Railroad Trainmen and Brotherhood of Locomotive Engineers. It recalls how "the jeopardy to the nation" prompted President Truman to place the railroads under government control and to initiate plans "for dealing vigorously with the situation." Such plans, however, were "not put to a real test because of the early termination of the strike." Meanwhile, the coastwise and other water carriers in the year under review had "few breathing spells between strikes by their waterfront and vessel employees," a strike also occurred against bulk carriers on the Great Lakes, and "motor transportation, particularly in respect of property, was also adversely affected by numerous strikes."

"The serious effect on the public welfare of such suspensions of service, particularly where substitute forms of transportation are not adequate, is self-evident," the commission continues. "Temporary remedies and expedients of a regulatory agency, such as our service orders and other remedial measures, necessarily afford only a limited amount of relief. We believe that the public interest requires a careful new appraisal of the possibility of avoiding strikes in transportation without unduly trespassing on the rights of contending groups.

The problem is not one which can be solved entirely by additional legislation; a large share of responsibility necessarily rests on carrier management and the leaders of organized labor. Any new legislative remedy which may be found necessary should encourage and implement efforts on the part of these groups to work together in what is basically a common cause."

An "ascending spiral of wages," the commission next points out, "inevitably leads to demands for higher transportation rates, for other means of offsetting these increasing costs are yet to be found." Here is recalled the previous annual report's observation that transportation service during the war was "relatively cheap in comparison with the general price level of commodities and services." The commission hastens to add, however, that "this circumstance does not obscure the serious implications in a substantial increase in transportation charges at the present time."

General rate increases, together with attendant changes in individual rate adjustments "are certain to have far-reaching effects on the distribution of commodities," for they point up the factor of competition which poses for the commission "difficult problems involving relations between carriers and their patrons, between territorial regions, between carriers of the same type, and between competing carrier groups of different types." The commission anticipates that such questions are likely to engage its attention "for a considerable time."

Although the large volume of traffic during the war and the concentration on military success lessened the play of competition among carriers, the commission reports that the different agencies of transport were nevertheless thinking about ways and means "of attracting for themselves the largest possible share of the anticipated sizable volume of traffic in the reconversion period." In other words, "the competitive impulse is as strong as ever, and is already manifesting itself in various ways."

Evidence of this in the railroad field is found by the commission in the acquisition "of much new passenger equipment of modern design and the speeding up of passenger and merchandise schedules." And while the railroads are thus found to have "faith in their future," it is also found that "many plans involving substantial expenditures for rehabilitation and modernization of facilities in the early post-war period have been set aside, at least temporarily."

"The uncertain outlook as to earning power and inability to obtain deliveries," the report also says in this connection, "have limited installations of new rail freight and passenger equipment to a figure lower than was expected and considered necessary a year ago. Conse-

quently, a great difficulty has been encountered in handling traffic, which, measured by car-loadings, in some recent weeks has exceeded that of corresponding weeks in the war years, 1944 and 1945."

Motor carriers of property "face much the same condition," while "no other branch of transportation has faced such difficult problems of post-war readjustment as water carriers." The earnings of freight forwarders in the first six months of 1946 were higher than in the same period of 1945, which was a better year than 1944; while the costs of operation of the Railway Express Agency "have risen materially, with resulting reductions in the payments made to railroads for services which the latter render."

Traffic and Revenues

The usual review of the traffic and earnings of transportation agencies included data which showed that carriers under commission jurisdiction reported for the fiscal year ended June 30, 1946, gross revenues of \$11,485,874,000, or 87.97 per cent of the \$13,056,147,000 reported for the record calendar year 1944. The railroads accounted for \$7,986,231,000 of the fiscal 1946 total. Traffic figures covering all carriers are given for the calendar years 1945 and 1944. In the former, the railroads produced 690,991 million ton-miles or 68.23 per cent of the total (1,012,750 million) ton-miles reported by all carriers. The railroads' proportion of the 1944 ton-miles was 69.25 per cent. Their proportion of total passenger-miles was also down—from 1944's 34.9 per cent to 30.66 per cent in 1945. This was attributable in the main to the resumption of private automobile travel, the auto's proportion being up from 54.03 to 58.76 per cent.

The commission's analysis of railroad earnings presents again the tabulation which considers employees and investors as jointly producing a net income to be shared by them. The figures, covering the 12 months ended June 30, 1946, show that the railroads in that period collected gross revenues and other income of \$7,979 million. Outlays for materials and supplies, depreciation charges, other expenses (except wages and salaries), and taxes, including payroll taxes, absorbed \$3,569 million, leaving a balance of \$4,410 million "remaining for employees and investors." Wages and salaries took \$3,758 million, leaving for investors a balance of only \$652 million, or 14.8 per cent of the employees-and-investors' total.

Whereas the similar tabulation in the previous report carried no footnotes, the present table has four, including one that calls attention to the fact that the "wages and salaries" or employees'-share figures do not include payroll taxes,

which are treated like other taxes as a deduction from gross in the process of arriving at the "remainder for employees and investors." [An article entitled "Investors' Share. Inaccurately Reported," which appeared in the *Railway Age* of October 5, 1946, page 556, examined these calculations of the commission, and criticized, among other things, the failure to include the payroll taxes for pension and unemployment benefits as part of the employees' share.]

Car Shortages

The report's brief reference to government operation of carriers as a result of labor disturbances during the year under review was followed by the commission's comment on railroad car shortages. The "two primary causes" of such shortages, it says, have been interruptions of normal industrial and transportation operations by strikes, and the inability of railroads to make adequate replacement and repair of worn-out and defective equipment. At the same time, the report calls attention to the reduction of about one day in the turn-around time of freight cars in August and September, 1946, as compared with the same 1945 months. "This achievement, attesting improved efficiency," it adds, "is all the more notable because the 1945 average reflects the expedited movement of petroleum and petroleum products in trainload lots, since discontinued."

As to railroad funded debt and fixed charges, the commission reports that from November 1, 1945, to October 31, 1946, it approved refunding issues which will effect a reduction of \$150,720,082 in future interest charges. As of October 1, 1946, the commission had approved plans of reorganization for 32 railroads which required reduction in long-term debt, not including unpaid interest, from \$3,299,859,000 to \$1,813,297,000, or approximately 45 per cent, "much of the latter being in the form of income bonds involving no fixed charges against income." The fixed charges under the 32 plans will be reduced from \$146,170,663 to \$40,109,468.

With further reference to railroad reorganizations, the commission says that progress under section 77 of the Bankruptcy Act has been greatly delayed by unsuccessful appeals from court orders, which are in the nature of interlocutory orders. In general, it explains, judicial determination of the rights of appeal enuring to the parties has resulted in two appellate procedures—"one from the order of approval and one from the order of confirmation of plans, often upon identical issues." It seems to the commission that the applicability of appellate law to these section 77 proceedings should be "clarified in such a manner as to eliminate the right of appeal from court orders approving plans."

With respect to its recommendation that legislation be enacted to permit railroads to make voluntary adjustments of their financial structures, the commission emphasizes that it would not favor making such legislation applicable to roads already undergoing reorganization, as did the bill which was enacted last year only to be vetoed by President Truman. "Any relief which should be given stockholders and junior creditors of a carrier in the process of reorganization under section 77 of the Bankruptcy Act, but which may not now be given because of restrictive provisions of that section, should be afforded by appropriate amendment to those provisions," the report suggests.

The fact that the Supreme Court has not yet passed on the interim adjustment it ordered in the No. 28300 class rate case is noted by the commission as it proceeds to report that the Uniform Classification Committee set up by the railroads is making progress in its work of formulating the uniform classification called for in the related No. 28310 proceeding. During the year, the committee "has completed an analysis of the level of the classification exceptions and commodity rates on the articles listed in the present consolidated classification, as an aid to determining a uniform rating for each article which will permit as many as possible of the exceptions and commodity rates to be canceled."

Various other proceedings pending before the commission are also discussed, including the Maritime Commission's complaint against water-competitive rail rates; the railroad buying group's application for approval of arrangements whereby it proposes to acquire the Pullman Company's sleeping-car business; the No. 29556 and No. MC-C-543 investigations into rail and motor charges on small shipments; the No. 29555 and No. MC-C-542 investigations of pickup and delivery service by railroads and motor carriers; and No. MC-C-550, "the first comprehensive investigation by us of fares of common carriers of passengers by motor vehicles."

On the matter of railroad operation and control of motor carriers, the commission asserts that it has "looked with some concern at the apparent tendency of many railroads to acquire a substantial interest, or prominent position, in the motor carrier industry." It goes on to note how it has been reopening proceedings involving railroad acquisitions of motor truck lines to impose conditions designed to keep the highway operations auxiliary to rail service. The commission anticipates that its reports on reconsideration in some of these cases may be contested in the courts. It goes on to say that "we have not as yet thoroughly explored the extent of our authority under sections 5(9) or 208 of the act to restrict operations under al-

ready issued certificates which are not subject to a specifically reserved right to restrict."

In its discussion of accidents, the commission states that its 1928 decision not to require further installations of automatic-stop or train-control devices under its orders of 1922 and 1924 in no way relieved the railroads "from their responsibility to provide additional protection where needed in territory equipped with block signals." In that decision, the report further recalls, "it was stated that expenditures for the preservation of human life should be generous and so distributed that the greatest possible measure of protection would be afforded; and that the carriers should be diligent in their efforts to provide adequate protection against accidents due to grade crossings, derailments, collisions in territory not protected by block signals, failure of wooden bridges and trestles, and the use of wooden passenger-train cars." Because the occurrence of "disastrous accidents" in recent years raised a "serious question whether the means employed to promote safety have kept pace with the needs of modern railroad operation," the commission instituted its No. 29543 investigation to determine whether it should require installations of block signals and train-control devices on all lines where any train is operated at a speed of 50 m.p.h. or more.

Train Communications

On the matter of "electronics in transportation," the commission reports that train communication systems are in regular service in 16 yards, 4 of these installations employing space radio and 12 using inductive systems.

Arguing in support of its recommendation calling for legislation of the Bulwinkle-bill type, the commission recalls that its previous annual reports had "expressed the fear of danger that undue breadth in interpreting and applying the Sherman Anti-trust Act may interfere which carrying out the national transportation policy, which forbids 'unfair or destructive competitive practices.'" The commission believes that "this danger still exists." Comment on the Administrative Procedures Act, which became a law last June, recalls that the commission made an unsuccessful attempt to have itself exempted and mentions difficulties "in reconciling provisions of the Interstate Commerce Act and related acts with those of the new act." While it will apply the new act "in letter and spirit, so far as ascertainable," the commission does not contemplate "any radical change in our organization or procedural methods until inconsistency with the new act is clearly shown."

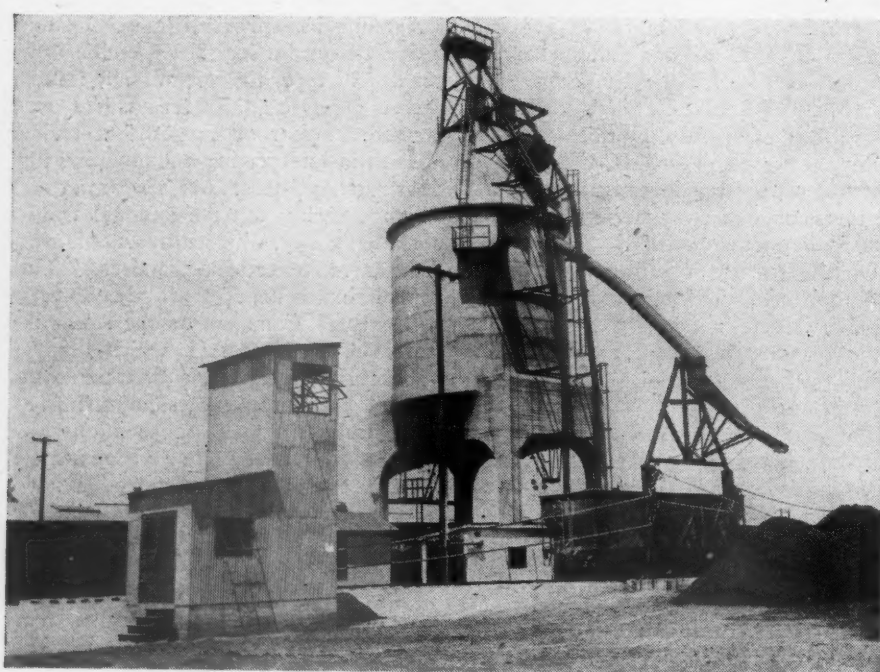
The remainder of the report embodies the usual separate accounts of the work of the commission's various bureaus.



Typical stock pile of coal on the Atlantic Coast Line.
Note drag scraper distributing coal in the storage area

Stores and Reclaims Coal at Low Cost

Atlantic Coast Line stock-piles emergency or standby supplies at several points with electrically-operated drag-scraper equipment, with large savings over former methods



The Atlantic Coast Line's coaling station at Wilmington, N. C., showing the outside extension chute and a small house (at the left) containing the drag-scraper hoisting machinery, with cables extending to the head posts

THE Atlantic Coast Line has equipped a number of its coaling stations with modern, electrically-operated drag scrapers of special design, which enable it to stock-pile and reclaim large quantities of coal against any emergency, and at a relatively low cost. Because much of the Coast Line mileage is located far from the mines from which it receives coal, and also because of recurrent labor troubles in the coal industry, it has been policy of this road for many years to stock-pile coal at strategic points. Originally the coal was unloaded and reclaimed by cranes. In 1927, however, the Coast Line installed electrically-operated drag-scraper equipment at its coaling station at Florence, S. C. In 1938, similar equipment was installed at South Rocky Mount, N. C., and Fayetteville, N. C., as an addition to 500-ton electrically-operated coaling stations at these points for current chute storage and delivery to locomotives.

Recently, new stock-piling and reclaiming facilities were added to existing coaling stations at Tampa, Fla., and Waycross, Ga., and similar facilities have

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been installed in connection with the construction of 500-ton electrically-operated coaling stations at Savannah, Ga., and Wilmington, N. C. This equipment, in each case, has cut the cost of stock-piling and reclaiming coal approximately in half, with savings at some points amounting to as much as \$800 a month.

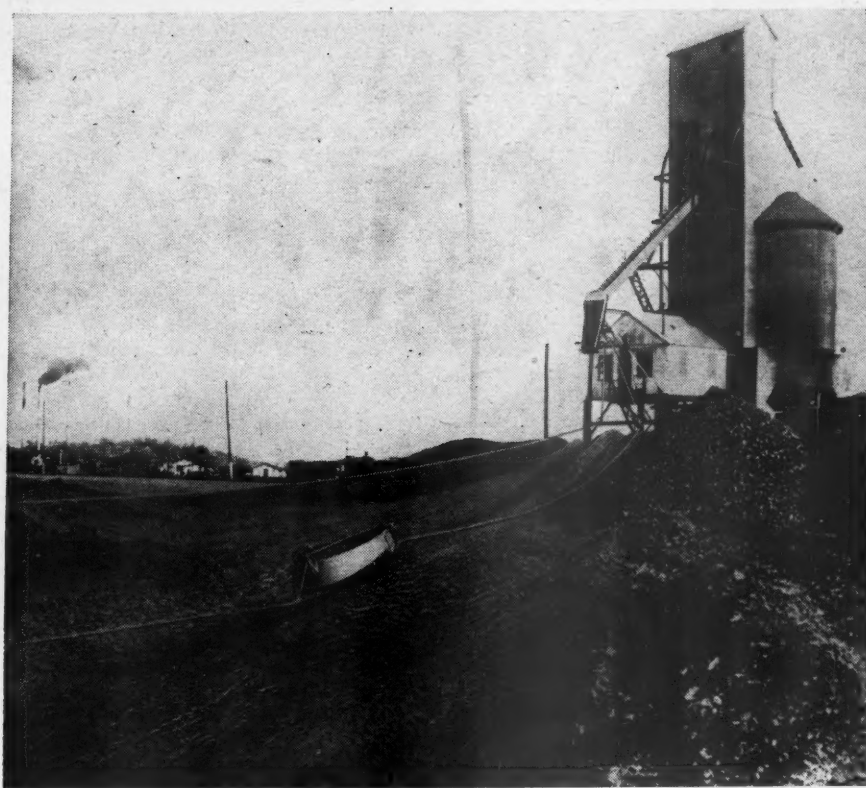
On the average, the combined operating and maintenance costs amount to about six cents per ton handled from cars to ground storage and return to chute for issuance to cars or locomotives.

The drag scraper equipment employed, which is handled by one operator, consists of an open-bottom crescent-shaped drag bucket, attached to cables operated by hoisting machinery installed at the coaling station. Chains at the front and rear ends of the bucket are attached to two cables—the load, or inhaul, cable, and the backhaul cable. The coal scraper hoist is designed to haul the bucket while loading, and when loaded, at 300 ft. per min., and to backhaul the empty bucket at 600 ft. per min.

Other components in the stock piling set-up include a "head" post 16 ft. high, which is set in a concrete footing or attached to the coaling station, and a series of 8-ft. "tail" posts, consisting of H-section beams set in concrete at points about 40 ft. apart around the outer edge of the ground storage area. The head posts have fair-lead blocks, or cable pulleys, attached near the top, and a tail block, or rear pulley, is attached to a bridle cable, fastened to two adjacent tail posts. The bridle cable includes a number of steel rings and, by moving it from one pair of posts to another, or by fastening the tail block to different rings on the cable, close control of scraper bucket travel can be obtained. As the result, it is possible to utilize to the maximum extent a storage area of almost any shape or contour.

Ground storage area is usually provided for 15,000 to 30,000 tons of coal, depending upon the location and needs at the particular point under consideration, and the coal is generally piled to a height of 15 to 20 ft. The coal is brought to the station in carloads and is unloaded by means of the normal coaling station equipment. In this operation, it is hoisted to the top of the coaling station, where it is diverted into an outside extension chute, which forms an initial pile on the ground in front of the stock-piling head post. The electrically-operated drag scraper then places the coal in the storage area. To reclaim the coal, the bucket is turned and operated in the reverse direction to bring the coal directly back to the track hopper, from which it is elevated into the coal chute bin in the usual manner.

The practice is to use 1½-cu. yd. drag buckets at most points, and the operating span normally does not exceed 300 ft.,



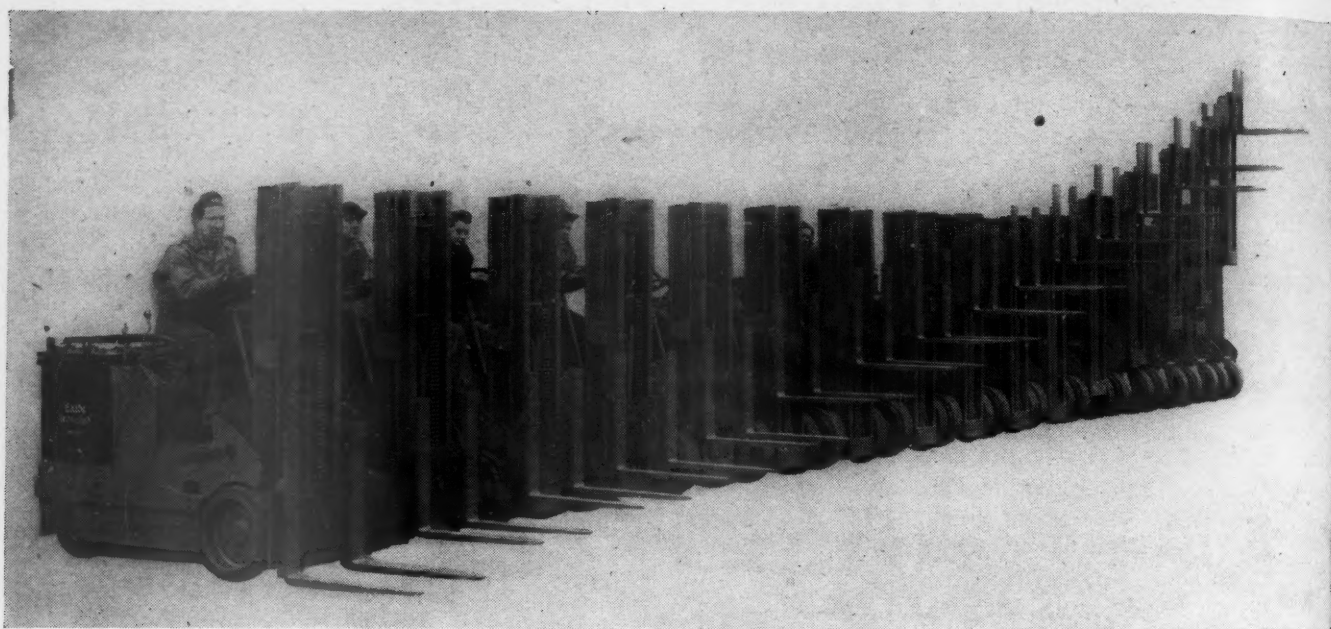
Above—Drag scraper reclaiming coal at Savannah, Ga. Photograph was taken during a coal strike when the coaling station was entirely dependent on storage coal. Below—One of the drag scrapers used in placing coal in a stock pile and reclaiming it. A "tail" post can be seen in the background at the left, and the top of another at the right



with the average much shorter. The handling capacities of this equipment under various lengths of haul are as follows: 110 tons an hour with an average haul of 100 ft.; 82 tons an hour with an average haul of 150 ft.; and 55 tons an hour with an average haul of 200 ft.

The drag-scraper equipment being used by the Atlantic Coast Line for

stock-piling coal was furnished by Sauerman Bros., Inc., Chicago, and was installed by company forces at all points except Savannah and Wilmington, where the coaling stations were designed and constructed complete, including the ground storage facilities, by the Ogle Construction Company, Chicago, and Ross & White Co., Chicago, respectively.



The Navy cooperated in the development of Automatic's fork-lift truck, which has a maximum lift of 130 in.

Moving "Hot Stuff" for the Fleet

The Navy experimented and found success with new lift trucks, small cranes and utility loaders for handling ammunition during the war; found A. A. R. units invaluable

AMONG other descriptive names, World War II was called a "war of movement." Mobility of the Army and the Navy in the tactical theaters of operations has been highly publicized, but another feature of this "war of movement," though less glamorous, was no less important. This was the transportation of the products of the great American arsenal to the various combat fronts.

The Navy participated in the great demand upon the railroads to furnish railroad cars and tractive power to start supplies rolling into the many supply lines extending in all directions from the United States. The principal ordnance item requiring rail transportation was ammunition.

An idea of how the problem of ammunition transportation grew can be obtained from a review of some production figures. In 1941 the total ammunition production was 66,000 tons. In the peak months, the first quarter of 1945, over 323,000 tons of ammunition were produced. In 1944—the peak full year (as the "cutbacks" came before the end of 1945)—over 1,100,000 tons of gun ammunition and rockets were produced by the Navy, not including bombs,

**By GEORGE F. HUSSEY, JR.,
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*Chief of the Bureau of Ordnance
Navy Department*

mines, torpedoes and other munitions. In 1944 rail shipments into and out of Naval ammunition depots and magazines totaled nearly 4,620,000 tons of explosive materials. In 1945 the total was almost six million tons.

A. A. R. Helps Safe Loading

With this tremendous quantity of ammunition came many new types which never before had been shipped, and for which new methods of car loading had to be devised. The Bureau of Explosives of the Association of American Railroads was of inestimable assistance to the Navy's Bureau of Ordnance in devising new, efficient and safe ways to load and transport ammunition. It gave freely of advice, and examined and approved all new plans. Its contribution to the war effort was outstanding.

The A. A. R.'s Military Transportation section also rendered the Navy and the Army a great service. When it became necessary to divert a shipment or to trace or expedite certain material, all that was necessary was to call that section and present the problem. This relieved the Navy of the need of maintaining a great number of records of shipments and schedules. The A. A. R. office kept a running record of all car locations and could put its finger on any car with the least amount of trouble. This office was also of great service in coordinating special trains, which often ran long distances to meet sailing dates for fleet operations.

The most spectacular operation conducted by the A. A. R. was to stop, within a few hours, all shipments of ammunition. V-J Day found 911 cars loaded with ammunition for the fleet and the amphibious forces on the way to ports. In a few hours the Military Transportation section stopped these cars and, within a few days, notified the Bureau of Ordnance of the locations of them all. It then proceeded to carry out the Navy's orders for diversion or reconsignment.

The Bureau of Ordnance had to do its part in cutting down the turn-around time of freight cars. To this end, the materials handling laboratory at the naval ammunition depot, Hingham, Mass., did much to improve methods and equipment for handling freight shipments, with special emphasis on ordnance equipment.

Handling at Depots

One of the simplest and, at the same time, most useful developments was the bridge ramp employed to bridge gaps between railroad cars and loading platforms. The old method of placing a piece of sheet steel over this gap was unsafe and not in keeping with modern practice. The new bridge ramp can be placed and locked into position by the operator of a fork-lift truck.

Two other cargo-handling devices which the Bureau of Ordnance assisted the manufacturers to develop were a new

fork-lift truck, and a hydraulic crane small enough to work inside a box car.

In an effort to obtain the most efficient and rapid handling of comparatively small loads or packages, the Bureau of Ordnance made extensive studies and tests of various types of electric and gasoline fork trucks. It was found that the conventional type gave good results in handling palletized loads when there was ample space for maneuvering and where the headroom was sufficient. However, in the holds of ships, in box cars, and in the narrow confines of some magazines the old type truck did not fill the bill. In cars, for example, during a lift, the telescopic uprights would rise to the top of the car before the second of two pallet loads could be lifted high enough to stack it on the first.

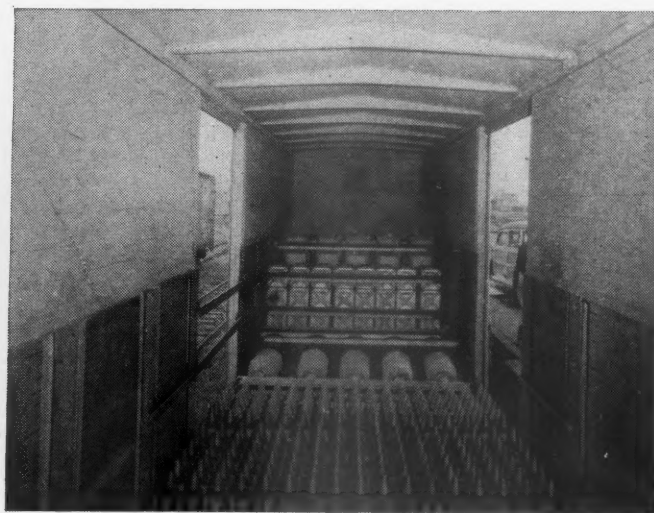
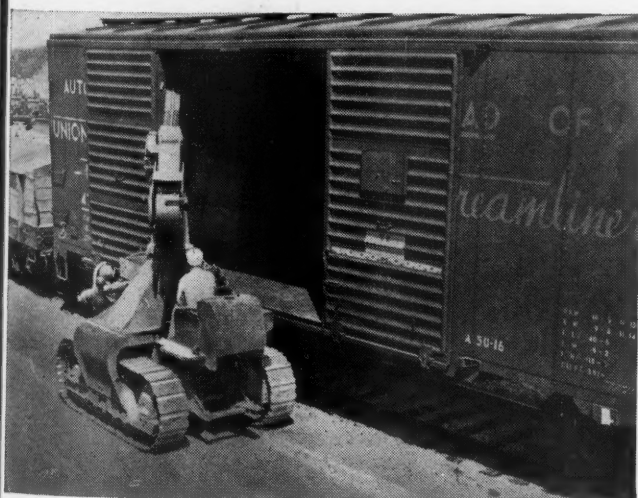
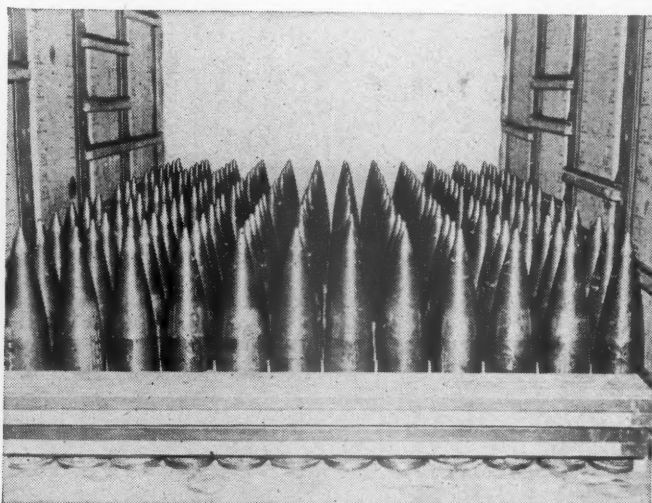
This made it necessary to do the stacking outside the car and have the truck carry the double load. Larger trucks, more aisle space, and, possibly,

larger doors were required under these conditions.

After considerable study and many tests, representatives of the Automatic Transportation Company, in conjunction with engineers of the bureau, were successful in developing an electric fork-lift truck that met all our requirements. This truck has a maximum lift of 130 in., maintains an 83-in. collapsed height, and will lift 67 in. before the telescopic uprights begin to rise. A second loaded pallet may, therefore, be loaded on top of the first within a box car. This new truck is also shorter and narrower than the older types of similar capacity, to give greater maneuverability.

Small Crane Developed

Hydraulically-operated and controlled mechanisms have been built into a wide variety of mechanical and construction equipment in the past, but there was no serious application in the field of ma-



Upper left—Five-inch projectiles positioned by utility loader. Upper right—Palletized 40-mm. ammunition boxes in utility-loader-equipped car. Lower left—Hydraulic crane maneuvered into tight places. Lower right—A car loaded by electric fork-lift tractors

terials handling cranes until the war years, when the Navy introduced the Austin-Western hydraulic crane. This unit is mounted on a conventional Diesel-powered, track-laying tractor. The small size of the vehicle is made possible by the use of hydraulic power for the lift. There is no turntable and no drums, clutches and brakes. The boom is extensible and retractable, and can be raised, lowered and rotated through the full circle. These operations can be performed in any combination. As loads can be picked up and deposited with the boom in a nearly horizontal position, it is evident that much less headroom is required than for the more conventional type of crane. Loads may be picked from the inside of or deposited inside cars without the extra handling usually required.

Navy Uses Utility Loaders

The Bureau of Ordnance owns about 1,400 freight cars, of which 1,300 are equipped with the utility loader.* This device, designed to replace shipping, dunnage or bracing, and developed for the bureau by the Evans Products Company, is a permanent part of the box car. Its advantages, compared with older means of bracing, are that wooden bracing and carpentry work are eliminated for each load—of great advantage during the critical lumber shortage; the adjustable parts lock the load in place and are easily unlocked; the operation is quick and simple; and the car is readily adaptable to mixed shipments.

The Bureau of Ordnance, as one of the earliest users of this device, was primarily interested in the savings to be realized in labor and dunnaging in intradepot movements of ammunition and explosives. In exhaustive tests made by the Naval ordnance materials handling laboratory the utility loader was found to be a time-saver beyond the expectations of its advocates. Furthermore, it was determined to be as safe as blocking and dunnaging with lumber. Acceptance by the A. A. R.'s Bureau of Explosives of the utility loader for securing most types of ammunition is ample evidence of its safety features.

Uses of this device beyond the confines of Navy depot trackage developed. As early as 1943, some Navy-owned cars were in service between ammunition depots and ordnance plants, carrying, for the most part, ammunition and explosives. But it was not until the new box cars with utility loader equipment installed came off the production line in 1945 that the greatest use in interchange service was realized. These cars have made a notable record for safety and long continuous service. During the

period October, 1945, to July, 1946, they traveled 1,606,112 miles in interchange service.

During the periods of car shortages on both the East and West coasts subsequent to V-J Day, the Navy-owned cars paid dividends in the shipping to inland storage depots of explosives received by the coastal depots from overseas ammunition and combatant ships. If it were not for the fact that these cars were in the possession of the Navy, East and West coast ammunition depots would have been overloaded to the point that safety might well have been endangered because of the heavy concentration of explosives in those areas. In addition, by utilizing these cars as ammunition carriers, the Navy was in a better position to reduce its requirements for Class A box cars critically needed for the movement of sugar, flour, grain and other products which can be handled only in Class A cars.

Prior to the Japanese attack on Pearl Harbor, the Navy had ten naval ammunition depots and five naval magazines.† Since that time seven new major depots and eleven magazines have been constructed.

Because of the nature of the materials to be handled at these ordnance activities, many considerations affected the choice of sites. The location of the depot with respect to its military mission; the character of the topography and its adaptability to safety requirements for

† The principal difference between a depot and a magazine is that depots generally have production facilities for the preparation, reworking and overhaul of ammunition.

NEW BOOK . . .

Men of Erie, by Edward Hungerford, 346 pages. 8¾ in. by 5¾ in. Bound in cloth. Illustrated. Published by Random House, Inc., 457 Madison Avenue, New York 22. Price \$3.75.

Edward Hungerford, the popular and prolific writer on railroading in its romantic and historical aspects, has produced another of his sure-fire "personal histories" about individual railroads. This time it is the vigorous veteran, the once-notorious Erie, that has found its way into the heart and head of the writer who deals with railroads as living organisms. He has omitted the sordid details of the Gould-Fisk-Drew era, which have been sufficiently reported by Adams in his *Chapters of Erie*, and has made no attempt to repeat the labors of Mott in his life-work history, *Between the Ocean and the Lakes*.

Instead, he has given the reading public a chatty, smooth-flowing tale about an interesting railroad, very much as Dickens would talk about a living human being, and traces the "slings and arrows of outrageous fortune" with which most of the road's past was crowded. As always, Mr.

magazine construction; the comparative isolation of the depot as a whole; the adequacy of rail and other transportation to the area; the availability of labor; and the degree of security with respect to enemy bombing attack were some of the matters which had to be considered. The Bureau of Ordnance consulted with and received valuable assistance from many railroads in making the choice of sites not only for the Navy's ammunition depots and magazines, but as well for naval ordnance plants.

The Navy's 33 ammunition depots and magazines have a total of more than 1,000 mi. of railroad trackage. The naval ammunition depot at Hawthorne, Nev., alone has 158 mi. of track. A movement of ammunition from one part of a depot to another—whether from one magazine to another or from a loading or filling plant to a magazine—would often entail a rail movement greater by far than many producers in private industry require to deliver raw materials to their factories.

Railroad men and Navy representatives met frequently to exchange views and technical knowledge and each took advantage of the experience of the other. The cooperation of the American railroads with the Navy during the war lessened the tremendous burdens of both in striving for the common end of getting the war finished in the least possible time. The teamwork provided the things that were needed at the time and place they would do the most good. That is the highest compliment that can be paid to organizations concerned with supplying the fighting forces.

Hungerford makes much of personalities and does it very well indeed, which is what one would expect of a man who has divided his life between talking to railroad men and writing about them.

The last quarter of the book deals with the modern Erie of today. The illustrations are good and are combined in the middle of the book where they may be enjoyed apart from the text . . . an excellent publisher's device which this reviewer hopes to see in further volumes of this type.

COMMUNICATIONS...

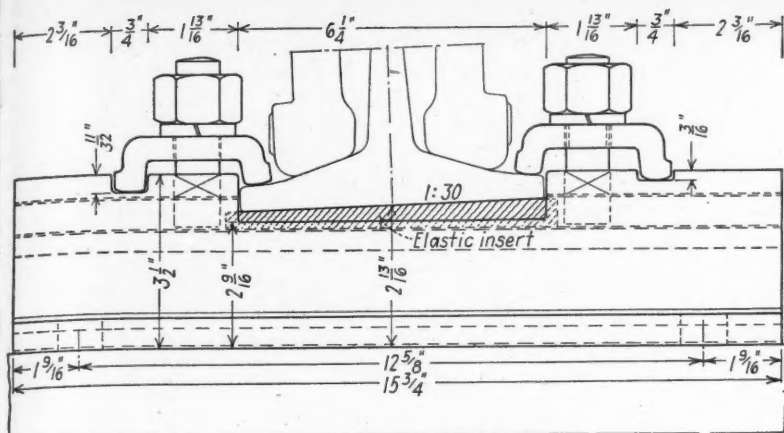
Says Rail Chairs Will Prevent Tie Damage

UTRECHT, HOLLAND

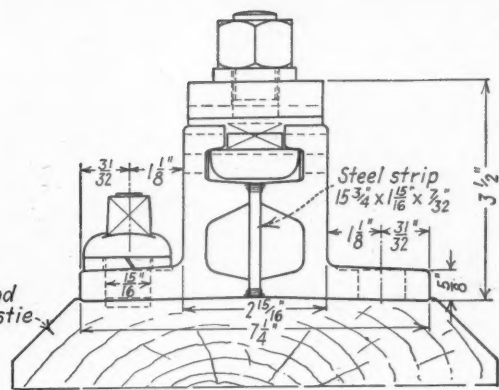
TO THE EDITOR:

I have read with a great deal of interest the editorial entitled "Substitute Crossties", which appeared in the *Railway Age* of August 31, 1946. On the Netherlands Railways we are also faced with a difficult problem in procuring crossties and in making them last longer, a problem that has been severely aggravated by the fact that these lines were extensively plundered by

* First 170 cars built by the Chicago, Burlington & Quincy; the remainder by the Pressed Steel Car Company.



ELEVATION OF CHAIR



END VIEW OF CHAIR

Details of rolled steel rail chair developed on the Netherlands Railways

the Germans during the war-time strike ordered by the Allied command.

It is my opinion, and that of most railway men, that timber is the best material for cross-ties. However, while the performance of timber ties has been greatly enhanced by modern methods of preservative treatment, as indicated in the editorial mentioned, the problem of mechanical damage remains to be solved. Although the process suggested by Mr. Burton* for eliminating such damage might achieve the desired results, one of the most valuable properties of timber for cross-ties, that of resiliency, would be lost.

I have in mind a much more simple device, by means of which not only can mechanical damage be eliminated but also damage that ensues from checking caused by exposure to the sun, resulting in decay of the wood due to the entrance of water through the checks—these advantages being achieved while retaining the resiliency of the wood. I refer to the use of rail chairs instead of tie plates. Such chairs can be so designed that the specific pressure imposed by the heaviest loads to be expected remains under that which can be tolerated by the longitudinal grain of the timber, thereby eliminating mechanical damage. Because of the height of rail chairs their rigidity is far greater than that of a tie plate, so that the load is distributed practically equally over the bearing area of the wood, a condition that is not achieved with flat tie plates.

When rail chairs are used, it is possible, because of their height, to cover the tops of the ties with ballast without jeopardizing the necessary insulation of the rails in electrified territory or where the tracks serve as a circuit for automatic signals. By covering the ties with ballast the top surfaces are protected from the sun and from drying out, thereby eliminating a cause of checking. Other advantages of using chairs are as follows:

(a) A separate fastening of the rail to

* In the editorial mentioned, W. J. Burton, assistant to the chief engineer, Missouri Pacific, was quoted as referring in an address before the annual meeting of the Tie Producers' Association to a process in which wood is converted into an extremely hard material by impregnating it with a plastic, and of suggesting that, if economically justified, such a process might be a means of rendering timber cross-ties highly resistant to mechanical wear.

the chair—that is, a fastening achieved by means other than that of the chair to the tie—can be easily arranged.

(b) The area of the rail bottom in contact with the chair can be small in the longitudinal direction of the track so that, with a resilient packing between the rail bottom and the chair, the rail is provided practically with a hinge-joint support, with the result that the ties can remain in a normal level position as they are depressed in the ballast during the passage of trains. When tie plates are used, even if separate fastenings are employed, the supporting surface of the rail bottom on the plates in the longitudinal direction is so large that, during the passage of trains, the ties are given a joggling motion instead of lying firmly in the ballast, with results that are detrimental to good track maintenance. While correcting this condition, the use of chairs with a resilient packing also obviates a support involving "iron on iron", thereby minimizing wear of the chair and the bottom of the rail, and also acts to deaden sound and to assure that trains will run smoothly at high speeds.

Until quite recently rail-supporting chairs were made of cast metal, largely cast iron because of the cost factor. The use of cast iron for such chairs has disadvantages owing to the brittleness of the material and the shrinkage that occurs in the castings. Such chairs, when used on hardwood ties, or even on softwood ties hardened by frost and imbedded in frozen ballast, suffered many breakages, leading, in turn, to rail failures. To overcome these disadvantages, a chair of rolled steel was developed by the Netherlands Railways, the details of which are given on the drawing. The chair shown is designed to accommodate a flat-bottom rail weighing 63 kg. per meter (about 127 lb. per yd.). In the interest of easier rolling, the chair sections shown will, however, be slightly modified for future use. All other types of chairs for railway purposes can be made of the same rolled section. As shown, each chair consists of two bars fastened together by the Union-Melt process of electric automatic welding after a small strip of metal has been interposed between them.

TH. MUNDT
Chief engineer of way and works,
Netherlands Railways

Crosser Law Opposition Stirs Employees

ROOM 411, 65 MARKET STREET
SAN FRANCISCO 5, CAL.

TO THE EDITOR:

Thank you for the article entitled "West Coast Employees Fight Crosser Act," which appeared on page 1091 of the *Railway Age* of December 28, 1946. Since release of this issue we have been bombarded with letters from employees of large and small carriers throughout the country requesting procedure we have been using to circulate petitions for repeal of the law. It seems that the rank and file of other carriers were also left out in the cold in so far as their knowledge of the requisites of the new law are concerned.

Employees of the following railroads are actually backing the program we have originated, with the list growing steadily:

- Atchison, Topeka & Santa Fe
- Central of Georgia
- Chicago, Burlington & Quincy
- Erie
- Illinois Central
- Minneapolis, St. Paul & Sault Ste. Marie
- Missouri-Kansas-Texas of Texas
- New York Central
- New York, New Haven & Hartford
- Norfolk & Western
- Northern Pacific
- Pennsylvania
- Peoria & Pekin Union
- Reading
- Richmond, Fredericksburg & Potomac
- Southern
- Southern Pacific
- Western Pacific

It is good to know that your magazine reaches the "little men" in the railroad industry as well as the officers. You are to be commended for helping us railroad workers in establishing a nationwide unity for repeal of discriminatory legislation.

At the present time we are happy to report that approximately 100,000 employees have signed petitions throughout the country.

EDOUARD E. ESCALLE.

Motive Power for Suburban Service

TO THE EDITOR:

CHICAGO

Suburban service is a costly and unprofitable, yet important and extensive branch of railroad operations. Commuter passenger traffic represents over 50 per cent of all passengers carried, nearly 20 per cent of the total passenger-miles, but only 10 per cent of the total passenger revenues of Class I railroads.

Street car and bus are indispensable supplements, but they cannot replace the suburban train with its large seating capacity and its fast and dependable service. Nor can boulevard or superhighway become serious competitors.

City and rural developments of the future depend on a largely expanded suburban railroad service. The tendencies point towards new residential and industrial settlements and suburbs, which are surrounded by large tracts of green or parks. They are to be connected with the metropolitan area by existing but extended radial lines, while belt or loop lines, which detour the congested inner cities, provide fast connections between neighboring suburbs, thereby tying them together to new commercial and cultural centers.

In short: The importance and extent of suburban service will grow rather than shrink. Consequently the railroads are confronted with tasks which go far beyond minor and sporadic improvements of their suburban rolling stock. One of the most important questions is: Steam, electric or Diesel power?

With the exception of New York and Philadelphia, steam propulsion still prevails. Even Chicago depends largely on suburban steam trains.

The disadvantages of steam power are: (a) High servicing costs, as the locomotives must be kept under steam during long idling hours; (b) smoke nuisance, both to passengers and city dwellers; (c) long runs between terminals and enginehouses. On the other hand, it must be remembered that most suburban locomotives are former rather powerful road locomotives which are able to maintain fairly good schedules. Some of these schedules could hardly be improved if the particular line were to be electrified.

While, by introduction of modern lightweight coaches, the schedules and comfort of steam trains could be improved, the goal must be the eventual elimination of steam power, excepting perhaps feeder lines at the outskirts of the cities.

The ideal is, of course, the electrified suburban lines. Yet, most of the electrified systems are 25 years old or more, and only a few lines have been converted since. As electrification requires heavy investments, it can be justified only where high traffic densities can be maintained also during the offpeak hours. Even then, the return on the investment may be but small. It is well known that independent electric suburban enterprises rank, from a profit standpoint, lowest among the major groups of stock corporations.

Lately, the use of Diesel-electric locomotives has been suggested. Advantages would include lower investments than in

the case of electrification, lower servicing costs and less smoke nuisance than in the case of steam locomotives. Disadvantages are: (a) The first cost of Diesel-electric locomotives is between 60 and 70 per cent higher than that of steam locomotives; and (b) with the present upper limit of 2,000 hp. per Diesel locomotive unit no important schedule improvements, if any, may be expected over those obtained by many of the present old-timer steam locomotives.

Another, perhaps better solution would be the use of Diesel-powered rail cars. They can be made up to trains of any length. It seems as though, under the impression of the rapid success of the Diesel road locomotive, the possibilities of the rail-car train have been somewhat overlooked. Most of us are inclined to associate with the term "rail car" the old gas or Diesel-electric "doodle bugs," which were the forerunner of the modern Diesel locomotives and which are still employed on many branch lines. In Europe, however, rail-car trains of two to nine cars had been rapidly introduced in the last pre-war years, for both suburban and interurban service. They have reached a high degree of reliability.

Comparing a Diesel-powered rail-car train of say six lightweight coaches with a train consisting of a Diesel locomotive and six lightweight coaches of the same total seating capacity, the rail-car train offers these advantages: (a) Operation in both directions without backing the whole train or shifting the locomotive at terminals; (b) lower first costs, as there is no locomotive chassis or vehicle; (c) lower fuel costs, as total train weight is smaller; (d) higher acceleration, as more axles can be motorized; (e) possibility of dividing the train into two three-car

or three two-car units, each unit having its own remote-control power plant (the result is a higher train frequency—instead of an hourly schedule in the case of locomotive trains, rail-car trains would follow each other at 30- or 20-min. intervals); (f) during peak hours, trains can be run in quick sequence, each train to consist of one, two or three units plus one, two or three ordinary lightweight coaches as trailers. If such trains skip certain intermediate stops in the customary manner, high average speeds can be maintained in spite of additional trailer weight; (g) these cars would permit easy conversion into electric trains with trolley or third rail if traffic becomes dense enough to warrant electrification.

The disadvantages of the rail-car trains, namely, the multiplicity of engine parts and of power plants, are offset by the fact that the parts are smaller and therefore easier to replace, and that inspection of the power plants en route as on road locomotives is not necessary due to the long idle hours at night.

Rail-car Diesel engines are of the high-speed type, with 1,200 to 1,600 r.p.m. and 600 to 1,000-hp. per engine. Together with their generators, they can be mounted either within or above a swivel truck or between the trucks under the car floor.

There are, of course, other questions of a basic and general nature, such as certain deviations of I. C. C. rules in regard to car design, or a better adaptation of heating and air conditioning to the peculiar conditions of suburban service, no matter what the motive power is.

All these problems require the coordinated efforts of railroads and builders. Now is the time!

H. BLEIBTREU
Consulting Engineer

* * *



The Canadian National has placed in service the first of 14 new parlor cars built in the road's shops. The cars feature automatic "cycle modulation" heating and air conditioning control, and rotating-reclining chairs with incandescent lighting over each seat

GENERAL NEWS

March N.R.A.A. Exhibit on Way to New Peak

84 companies line up to show
engineering and maintenance
officers their wares

As applications continue to be made to the secretary's office for the Thirty-Second Annual Exhibit of the National Railway Appliances Association, to be held in Chicago, March 17-20, in conjunction with the annual convention of the American Railway Engineering Association, indications are that the event this year will exceed in size and scope any exhibit of the association for the last 25 years. Already, 84 member companies of the association have contracted for space, to include 180 booths, and many companies have still to make definite arrangements.

The exhibit this year, which is the first since the restricted showing in 1942, and the first large-scale exhibit since 1941, will be held at the Coliseum and will be unusual not alone in its size, but also in the number of new companies to participate and in the wide range of new materials, equipment and appliances that will be on display for the first time.

Arrangements for the exhibit are being planned and carried out by the officers and directors of the association, including the following: President, W. J. Hanna, Republic Steel Corporation, Chicago; secretary, C. H. White, Industrial Brownhoist Corporation, Chicago; treasurer, V. E. McCoy, National Aluminate Corporation, Chicago; honorary directors—H. H. Talboys, Nordberg Manufacturing Company, Milwaukee, Wis.; R. B. Fisher, Buda Company, Harvey, Ill., and J. S. Hutchins, Ramapo-Ajax division, American Brake Shoe Company, Chicago; directors—Lem Adams, Oxweld Railroad Service Company, Chicago; C. L. Mellor, Barco Manufacturing Company, Chicago; H. M. McFarlane, O. F. Jordan Company, East Chicago, Ind.; F. P. Cullen, Cullen-Friestedt Company, Chicago; W. F. Casper, Fairmont Railway Motors, Inc., Fairmont, Minn., and Max K. Ruppert, P. & M. Company, Chicago.

With a highly flexible floor plan, there is a large amount of desirable exhibit space still available, inquiry concerning which should be made to Secretary White, at the association headquarters, 208 S. LaSalle st., Chicago. A list of the exhibitors to date follows:

Achuff Railway Supply Company, St. Louis, Mo.
Air Reduction Sales Company, New York
American Fork & Hoe Co., Cleveland, Ohio
American Hoist & Derrick Co., St. Paul, Minn.
Armco Drainage & Metal Products, Inc., Mid-
dletown, Ohio
Austin-Western Company, Aurora, Ill.
Barco Manufacturing Company, Chicago

C. & O. Tickets-on-Credit Plan Effective

The Chesapeake & Ohio has announced through newspaper advertisements that it will put into effect on January 27 its plan to provide patrons of its passenger trains with credit cards that can be used for making Pullman or reserved-seat coach reservations and for charge purchases of tickets, dining car meals, and baggage service. Holders of credit cards can make reservations in advance by telephone and go directly to their assigned space on the train, avoiding any stop at the ticket office, as the tickets may be obtained on the train either for cash or by charging them on the credit card, the advertisements explain. Unused Pullman space, if not relinquished in advance of train departure as required under Pullman tariffs, will be charged to the customer's account.

Bernuth, Lembecke Company, New York
Buda Company, Harvey, Ill.
Caterpillar Tractor Company, Peoria, Ill.
Chicago Pneumatic Tool Company, Chicago
Chipman Chemical Company, Bound Brook, N. J.
Cullen-Friestedt Company, Chicago
Dearborn Chemical Company, Chicago
A. P. de Sanno & Son, Inc., Phoenixville, Pa.
Henry Diston & Sons, Inc., Philadelphia, Pa.
Duff-Norton Manufacturing Company, Pitts-
burgh, Pa.
Eaton Manufacturing Company, Reliance divi-
sion, Massillon, Ohio
Electric Tamper & Equipment Co., Ludington,
Mich.
Fabreeka Products Company, Boston, Mass.
Fairbanks, Morse & Co., Chicago
Fairmont Railway Motors, Inc., Fairmont, Minn.
General Chemical Company, New York
Hayes Track Appliance Company, Richmond, Ind.
Homelite Corporation, Port Chester, N. Y.
Hubbard & Co., Pittsburgh, Pa.
Independent Pneumatic Tool Company, Chicago
Industrial Brownhoist Corporation, Bay City,
Mich.
Ingersoll-Rand Company, New York
International Harvester Company, Chicago
Jaeger Machine Company, Columbus, Ohio
Johns-Manville Sales Corporation, New York
O. F. Jordan Company, East Chicago, Ind.
Joyce-Cridland Company, Dayton, Ohio
Kershaw Company, Inc., Montgomery, Ala.
Koehring Company, Milwaukee, Wis.
Lehon Company, Chicago
Le Roi Company, Milwaukee, Wis.
Lundie Engineering Company, New York
Maintenance Equipment Company, Chicago
Mall Tool Company, Chicago
Marvel Equipment Company, Chicago
Master Builders Company, Cleveland, Ohio
Modern Railroads, Chicago
Monroe Railway Appliance Company, Tuscola,
Ill.
Morden Frog & Crossing Works, Chicago
Morrison Railway Supply Company, Buffalo,
N. Y.
Murdock Manufacturing & Supply Co., Cincin-
nati, Ohio
National Aluminate Corporation, Chicago
(Continued on page 242)

"Keep 'Em Moving" Is Kendall's Answer

C. S. D. chairman knows of
no other way to handle ex-
pected rise in traffic

The national forecast of the 13 Regional Shippers Advisory Boards, which predicts that freight car loadings in this year's first quarter will be 8.8 per cent above those of the comparable 1946 period, points up the necessity for making "Keep 'Em Moving" a slogan of "real importance to all," Warren C. Kendall, chairman of the Car Service Division, Association of American Railroads, said in his latest monthly review of the "National Transportation Situation." He warned that, in view of the present tight freight car situation, the further increase in loadings must be accompanied by "an even more intensified effort in the matter of movement of cars by the carriers, and likewise shippers and consignees must load and unload equipment without delay."

Last year's total loadings of 41,341,205 cars, only 1.4 per cent less than the 1945 total, looked to Mr. Kendall like "a remarkable record in view of the many labor disturbances and other vicissitudes which in the past 12 months hampered both industry and the carriers." And he saw "nothing in sight to anticipate any diminution in the demand for freight cars for all classes of commodities."

Automobile Traffic Up—The requirements for box cars of all types "continue extremely heavy and exceed the supply in practically all sections of the country." With respect to stock cars there has been an increase in the demand since January 1, but the supply "has been fully adequate to take care of all requirements." The automobile manufacturing industry is now hitting a stride which is expected to result in a considerably increased demand for automobile box cars, the first quarter loadings of automobiles and auto parts being estimated in the Shipping Board forecast at 100,000 cars above last year's first three months.

Coal loading thus far this year "is somewhat higher than the heavy loadings of early 1946," while other commodities using hopper cars are expected to continue moving in heavy volume. These will include materials for the government's housing program and other construction work, a large proportion of which move in open-top cars. And the Solid Fuels Administration has set an "ambitious" coal-export schedule of 3,000,000 tons per month for January and subsequent months.

Gondolas released when iron and steel
(Continued on page 242)

Rails Should Foster Youth Travel—Young

Advocates sample rides and million sales agencies throughout nation

Charging that "most of even the \$5 or \$7 million which all the nation's railroads now spend annually in advertising serves no useful purpose," Robert R. Young, chairman of the Chesapeake & Ohio and the Alleghany Corporation, was quoted in the second of two articles which appeared in the January 20 issue of Advertising Age, to the effect that the railroads don't need institutional advertising, but need "to give the people more worthwhile services, and then advertise them."

According to the article, Mr. Young proposes huge advertising and sales programs for the railroads, including the creation of a "million sales agencies" covering every crossroad community. He favors low-cost sample rides, especially for children, and the article declares, "believes that America's youth again can be induced to think of railroads and Pullmans as their main line to adventure and personal development."

"Every California child should see the Statue of Liberty and every Maine child should see the redwoods," the article quoted Mr. Young. "I hope to be able to give every child in the country a free railroad ride."

Would Spend a Lot—Mr. Young continued, in the interview: "Where an industry, such as the railroads, has a high ratio of fixed to total cost it can afford to spend many times as much in advertising and promotion as can an industry with a low ratio. Whether a passenger train travels full or nearly empty, the train, station and other operating and maintenance personnel must be at work. Because it costs 'nothing' to carry an extra passenger, the railroads can afford to spend on promotion 90 cents of each new travel dollar."

The Advertising Age continues as follows: "Starting with toy and miniature trains, Mr. Young intends to do a lot of things to rekindle the interest of youth in railroads and in what he calls 'the mystery of Pullmans.' And this means grown-up youth, too. He blames the railroads for failing to follow up the long distance rail travel 'sampling' which they provided 4,000,000 young servicemen in 1917-19. Unless they act promptly and vigorously, they will lose as travelers most of the 12 or 13 million whom they carried in World War II."

Would Enlist Boy Salesmen—Mr. Young would make sales agents of boys across the country and pay them commissions for getting people to take rail trips, the article stated. These boys, the article continued, could go to the Boy Scouts, the Y. M. C. A., churches and schools and organize small parties. Families could take weekly or monthly week-end trips and spend their travel money that way instead of getting a new automobile, according to the article.

Mr. Young was quoted as follows: "Every bank in the United States is now used as a railroad service agency, for travelers' checks and otherwise. Why couldn't the railroads pay the banks commissions for business which they create?"

According to the article, he further declared that "the people's travel urge is greater than ever. They have more leisure time—more travel time—than they had 25 or even 10 years ago. They have more money for travel. It's time the railroads started getting some of it."

The Advertising Age quoted Mr. Young's definition for public relations as: "Doing a good job and getting credit for it." The magazine added that the head of the C. & O. is "proud that the sobriquet, 'gadfly on wheels,' which the Boston Traveler pinned on him, is getting around."

Eight Dead, 92 Injured in Derailement of S. P. "Owl"

Eight passengers were killed and 92 others injured when the Southern Pacific's train No. 58—the "Owl"—southbound from San Francisco, Cal., to Los Angeles, hit a broken rail at 2:45 a.m., on January 17, causing four coaches and one sleeper to derail and overturn. The accident occurred near Lerdo station, approximately 12 miles northwest of Bakersfield, Cal.

The derailment locale is flat, level country where the track is straight and a speed of 65 m.p.h. is permitted, the road stated. It is believed that the derailment was caused by a broken rail resulting from a transverse fissure near a rail-joint.

All of the dead were passengers in the overturned coaches, the foremost passenger cars of the 15-car train. Seven cars were derailed, but did not overturn. The locomotive and the mail, baggage and express cars remained on the track.

New Australian Line to Connect Darwin with South

Sir Harold Clapp, Australia's director general of rail standardization, has announced that a standard-gage railroad to cost some £20 million (Australian) will be built in that country to connect Darwin in the Northern Territory, with the South Australian railroad system, according to Foreign Commerce Weekly, a publication of the Bureau of Foreign and Domestic Commerce of the United States Department of Commerce.

The report gave no indication of when the work would begin. The line will be built as a direct north-south road. Starting points of the project will be selected after inspections by engineers, but much of it will be controlled from the Darwin end because of the availability there of deep-sea port facilities.

An existing line now runs in a southerly direction from Darwin and ends at Birdum. A spur from the South Australian railway system, goes northward as far as Alice Springs in the Northern Territory, approximately 600 miles south of Birdum, but there has been no railroad connection between the two lines, leaving Darwin and surrounding territory dependent on highway or air transport for communication with the more populous southern coast.

Attacks Subsidizing of R.R. Competitors

H. W. Burtness calls for same tests on tax-built as on private projects

Policies that result in diverting traffic away from the railroads and to competitors who enjoy favored treatment will damage rather than advance the public interest as long as the railroads must be depended upon to furnish the major part of the country's transportation, H. W. Burtness, president of the Chicago Great Western, declared in an address on January 16, before the Men's Club of the Young Men's Christian Association at Oak Park, Ill.

Mr. Burtness said that government transportation projects should be required to meet the same tests as to public convenience and necessity as the government requires of privately-owned forms of transportation. He charged that expenditures of vast sums of public money on projects of unproven and doubtful economic value not only constitute a threat to existing transportation, but impose an unwarranted burden on the taxpayers.

He asserted that the "stage seems to be set" to spend several billion dollars, all to be raised by taxation, to provide additional transportation facilities that will be competitive with the railroads, and added that nothing has been done toward requiring the carriers who will use them to pay any part of their cost, or any share of the recurring costs of their maintenance.

"Additional lines of railroad cannot be built, even by private capital, unless there is an advance finding by the Interstate Commerce Commission that they will serve public convenience and necessity, that they will be self supporting, and that their operation will not impair the service ability of existing lines," Mr. Burtness stated. "When federal waterway, airway and highway projects all are subjected to a like test, projects that will not fully pay their own way and those that will weaken the ability of existing agencies to continue paying their own way, will not be authorized as a result of political pressures and 'pork barrel' legislative procedures."

The speaker declared that the railroads will not have sufficient income to encourage large outlays of capital for improvements without greater traffic volume than has been enjoyed in previous peace-time years at the level of rates the I.C.C. recently established. "The importance of traffic volume, from both a public and a railroad standpoint, cannot be overemphasized," he added.

"During the war, when there was more traffic than ever before to be shared by all carriers, the railroads performed upwards of 80 per cent of the country's total inter-city freight service," Mr. Burtness stated. "Before the war, the railroads were performing less than 65 per cent of the total, largely because of subsidies, in one form or another, to other transport agencies. A return to that ratio of division of the country's peace-time traffic obviously will adversely affect the railroads' ability to function effectively on a com-

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pletely self-supporting basis, and their ability to furnish the public with adequate service at low rate levels."

1946 Ton-Miles

The volume of freight traffic handled by Class I railroads in 1946 was approximately 13 per cent under 1945 and about 20 per cent less than in 1944, according to a preliminary estimate by the Association of American Railroads. Freight traffic in 1946 totaled approximately 590.5 billion ton-miles, compared with 681 bil-

	1946	1945	Per cent change
First 10 months	490,444,064,000	584,608,521,000	d 16.1
November a	51,500,000,000	49,762,306,000	i 3.5
December b	48,500,000,000	46,295,117,000	i 4.8
Total	590,500,000,000	c 681,000,757,000	d 13.3

a Revised estimate.
b Preliminary estimate.
c Total includes adjustments not made in monthly figures.

lion ton-miles in 1945. Compared with two years ago, the decrease was 147 billion ton-miles.

Traffic during December, 1946, amounted to about 48.5 billion ton-miles, an increase of 4.8 per cent compared with December, 1945, while the amount of traffic handled by the Class I roads in December, 1946, was 69 per cent greater than the volume carried in December, 1939.

The table summarizes revenue ton-mile statistics for 1946 and 1945.

Says Private Operation Is Up to Transportation Men

The conclusions and positions taken by transportation men will determine whether our national transportation system will be privately owned and operated or taken over by the government, A. H. Schwietert, traffic director of the Chicago Association of Commerce & Industry, told members of the Central Western Shippers Advisory Board and the Traffic Club of Sioux City, Iowa, at a meeting in that city on January 15.

Mr. Schwietert declared that private operation of the railroads in World War II was an important factor in handling a greater volume of traffic with much less equipment than during World War I. He attributed this achievement also to the planning of carriers and shippers, in cooperation with government agencies.

Attacking subsidies given the railroads' competitors, the speaker declared that "if we are to continue under a system of private enterprise, then subsidies must be discontinued and each form of transportation must pay its own way." He added that "many practical difficulties are encountered in an effort to determine whether or not each form of transportation, such as motor carriers, the water carriers or the air lines, are paying their own way."

Total Dieselization Will Afford Big Economies—Dezendorf

The complete elimination of steam motive power facilities will afford economies which will enable railroads to withstand severe traffic fluctuations and still remain financially healthy, N. C. Dezendorf, director of sales and service of the Electro-Motive Division of General Motors Cor-

poration, told members of the Traffic Club of St. Louis, Mo., at their annual dinner on January 15 at the Jefferson Hotel. Mr. Dezendorf said that these economies will permit sufficient earnings in favorable years to allow for badly needed improvements to plant and equipment. He declared that medium of transportation cannot maintain its position successfully against new forms of competition if it lacks earning power to promote its services to the maximum.

The speaker announced that the Electro-

Motive Division had been invited to cooperate with ten railroads in the preparation of studies to Dieselize all or important sections of their lines. These changes will effect large economies in operation, and the "eventual complete Dieselization of important railroads will bring a few more surprises," he said.

Mr. Dezendorf expressed the opinion that the shift in traffic from the railways to truck and bus transportation was caused as much by neglect on the part of the railroads in matching the services offered by these forms of transportation as by the subsidies in highway construction which are usually blamed for it. "The rapid expansion of airplane usage occurred at the time when railroads were confronted with financial problems of the first magnitude," he stated, "and for this reason they were prevented from matching many of the improvements in service—other than speed—which attracted both passengers and shippers."

At the close of the meeting a tribute was paid to the late P. J. Watson, president of the Terminal Railroad Association of St. Louis, who died last November. J. F. Holland, vice-president of the Manufacturers' Bank & Trust Company, at St. Louis, said that the citizens of St. Louis will be ever grateful for the large-scale modernization improvement program which was carried out under Mr. Watson's direction.

M. P. Revamps Timetable

A thoroughly modernized public timetable has just been issued by the Missouri Pacific. Features of the new folder include a four-color cover and a similar map insert, both printed on special heavy paper stock. The central theme of the front cover is a picture of the "Colorado Eagle" speeding before a background view of the Colorado Rockies, while the back cover is devoted to advertising new passenger trains now being built. Perhaps the most attractive pages are devoted to the map, in which each state is printed in a different color. By the use of pastel shades, each state is clearly separated from its neighbors, and a pleasing overall color effect is secured.

Prominent in the timetable are pages de-

voted to advertising the road's freight service, including descriptions of its freight and passenger equipment on order and of some of its major freight operations. The pages devoted to train schedules and consists have not been overlooked; they have been simplified by the elimination of extraneous material and by the use of larger type for the headings of the tables.

Freight Car Loadings

Loading of revenue freight for the week ended January 18 totaled 828,060 cars, the Association of American Railroads announced on January 23. This was a decrease below the previous week of 2,885 cars, or 0.3 per cent, an increase of 78,617 cars, or 10.5 per cent, above the corresponding week last year, and an increase of 50,488 cars, or 6.5 per cent, above the comparable 1945 week.

Loading of revenue freight for the week ended January 11 totaled 830,945 cars, and the summary for that week as compiled by the Car Service Division, A. A. R. follows:

Revenue Freight Car Loading

For the Week Ended Saturday, January 11

District	1947	1946	1945
Eastern	159,032	155,302	146,377
Allegheny	175,594	165,941	166,735
Pocahontas	69,138	54,550	54,973
Southern	138,340	119,484	125,102
Northwestern	93,028	91,029	85,889
Central Western	134,638	127,718	130,773
Southwestern	61,175	58,864	73,211

Total Western Districts	288,841	277,611	289,873
Total All Roads	830,945	772,888	783,060

Commodities:			
Grain and grain products	56,193	54,451	46,687
Livestock	21,499	18,148	17,922
Coal	203,466	170,066	173,850
Coke	14,357	12,983	13,779
Forest products	46,645	32,861	38,954
Ore	12,159	9,720	11,179
Merchandise l.c.l.	114,180	116,001	100,239
Miscellaneous	362,446	358,658	380,450

January 11	830,945	772,888	783,060
January 4	687,428	652,978	683,398
December 28		627,967	505,977
December 21		836,181	687,845
December 14		828,787	771,594

Cumulative total, 2 weeks	1,518,373	1,425,866	1,466,458
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In Canada.—Car loadings for the week ended January 11 totaled 71,219 cars, as compared with 50,455 cars for the previous week and 69,528 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
January 11, 1947	71,219	34,023
January 12, 1946	69,528	34,323

Cumulative totals for Canada:		
January 11, 1947	121,674	63,079
January 12, 1946	120,228	62,262

Domes of Pressure-Type Tank Cars to Be Painted White

W. C. Kendall, chairman of the Car Service Division of the Association of American Railroads, has notified all roads that because there has been no diminution in the demand for pressure-type tank cars, nor in the need for their expeditious movement, arrangements have been set up whereby the domes of all such cars will be painted white by owners and shippers so

that they may be distinguished and moved promptly.

Mr. Kendall said that according to recent advice from the Office of Defense Transportation, based on reports from tank car owners and shippers, present instructions, in effect since October 3, 1946, have not resulted in any marked improvement in turn-around time on pressure tank cars. He said this condition was due apparently to the fact that those directly concerned with their movement are not able to distinguish and give necessary attention to the cars.

"The Office of Defense Transportation reports that the situation is critical," Mr. Kendall said in part. "Therefore, they request that special instructions be reissued to expedite both loaded and empty movement of all pressure tank cars, with particular emphasis on switching service at origin, destination and intermediate interchange points . . ." He added that painting the car domes white should facilitate ready identification, insure prompt handling of all loaded and empty cars and eliminate avoidable delays.

New York's Grand Central's 1946 Traffic a New High

A new high record for railroad passenger traffic in and out of New York's Grand Central Terminal, was set in 1946, according to J. H. Hustis, Jr., manager of the terminal. Passengers totaled 65,156,063, an increase of 436,489, or .07 per cent over the total for 1945, itself a new mark, he stated. A new record for passengers handled in any single day, 245,816, was made November 27. Passengers in and out of the terminal exceeded 200,000 on 113 days during 1946, against 73 such days in 1945.

Although the New York Central's total number of passengers handled in the terminal and its total of suburban passengers, as well as the New York, New Haven &

Hartford's reduced fare passengers, all set new records for the year, a decrease occurred on both roads in through passengers handled. Through passengers on the New York Central totaled 8,530,251, against 9,279,609 for 1945; suburban passengers increased to 27,090,813, against 25,281,518; through passengers on the New Haven were 17,395,619, against 19,173,641 for 1945; commuter and other reduced fare passengers increased to 12,139,380, against 10,984,806 for 1945.

Conn Outlines Program to Avert Government Ownership

Government ownership of transportation is inevitable unless leaders in the industry are willing to accept the responsibility of regulated competition, Donald D. Conn, executive vice-president of the Transportation Association of America, said in an address before a Northwest Regional Shippers Advisory Board meeting in St. Paul, Minn., on January 23.

A dual-purpose cooperative program between government and private enterprise, he said, would involve (1) the reconstruction of the physical and financial positions of common carriers so that the people of this country will continue to enjoy the most dependable and efficient services at the lowest rates consistent with the preservation of private ownership; (2) a recognition of the fact that transportation is a service to the public, that regulation must be designed from that standpoint and not used as an instrument for exploitation by pressure groups or by class interests for self-gain at public expense; and (3) the application of the underlying concept of the Shippers Advisory Boards to all relationships within the industry and between the industry and its patrons and investors. Self-rule within the system of private enterprise must be carried out to the maximum, thus leaving no room for government intrusion.

In the sphere of legislation, Mr. Conn continued, the following steps should be taken: The exclusion of regulated transport from anti-trust law; the reduction of regulation to the absolute minimum actually required in the public interest; the centralization of regulation in a single federal body; the coordination of federal procedures which influence the costs and the prices of services performed by regulated agencies; a provision that government capital invested in transportation shall supplement rather than compete with private capital; the coordination of the functions of some 54 government agencies now engaged in promoting transport in one way or another; and the abolition of such class legislation as the Crosser bill.

The first step in the sphere of self-rule, he stated, should be the promotion of voluntary consolidations of railroads. Secondly, Mr. Conn went on, we should "look to the ultimate development, voluntarily, of competitive common carrier transportation systems, each system being permitted to own and operate any transport facility that will most effectively provide for a complete service to the public at the lowest cost, with a minimum of invested capital. There should be centralized responsibility over the job of furnishing the public with transport services."

"Leaders of enterprise within and outside of the industry should expect no more from Congress than an opportunity to implement private enterprise constructively with a minimum of regulation," he asserted. "Beyond that the responsibility rests with themselves. If they are unwilling or unable to accept this responsibility, government ownership of transport is inevitable."

Material-Handling Conference Stresses Mechanized Methods

The realization that a nationwide conference and exposition of material-handling equipment represented the most fruitful possibilities for American industry to control and reduce material handling costs led industrial leaders and equipment manufacturers to cooperate in the presentation of the first National Materials Handling Conference and Exposition, in the Public Auditorium, Cleveland, Ohio, on January 14 to 17, inclusive. More than 40 papers grouped according to industries were presented during the four-day conference, and practically all types of material-handling equipment was exhibited by more than 108 exhibitors.

B. T. Adams, general storekeeper of the Illinois Central, and G. A. Goerner, general storekeeper of the Chicago, Burlington & Quincy, represented the railroad industry. The former discussed the various ways in which mechanical equipment is being utilized by the I. C. in stores handling. He stated that both wood and steel pallets are being used in handling and storing cement, soda ash, rail joints, nails, rivets and a large number of other commodities shipped in kegs. He remarked that manufacturers are cooperating in loading material as specified by the purchaser, and that they are endeavoring to devise ways to adapt many other items to palletized shipment.

In his paper, Mr. Goerner traced the advancement made by the railroads in improving material-handling techniques and



The "Cyclotron & Southern"

Part of the 473-ft. spur specially laid by the Erie into the University of Rochester campus in order to deliver massive magnet forgings for the university's new 1,200-ton atom. smasher.

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stressed the numerous advantages to be derived from detailed studies of each problem involved. In discussing the use of fork lift trucks and pallets, Mr. Goerner said: "We have only scratched the surface in the use of pallets, and I can visualize that in the future most bulky and heavy materials will be shipped and stored in storehouses on pallets. Manufacturers will cooperate in shipping material on pallets; orders placed for material will specify this method of shipment. Thus, there will be realized a labor saving by the manufacturer as well as by the railroads."

Russia Undertakes Big Rail Revamping Program

The Soviet Union's current plan for modernizing and extending its railway system will cost 40,100,000,000 rubles, almost one-sixth of all new capital investments to be made in the country before 1950, according to an article by Seymour T. R. Abt of the transportation and communications division, Office of International Trade, United States Department of Commerce, in a recent issue of *Foreign Commerce Weekly*, a publication of the department's Bureau of Foreign and Domestic Commerce.

According to I. P. Kovalev, the Soviet Union's minister of railways, the building of new railways will be designed to reinforce connections between principal industrial areas and to facilitate the exploitation of natural resources. The new lines, Mr. Abt writes, will total 4,493 miles. New rail will be laid on 31,000 miles of existing road and 7,800 miles of secondary track will be constructed or restored.

The production and laying of heavy rails are to begin before 1950, he continues. Automatic block signaling is to be installed on 6,600 miles of track and the electrification of 3,300 miles of track is anticipated. The plan calls for an increasing use of electric and Diesel-electric motive power. Automatic brakes are to be fitted to 93 per cent of all freight cars and automatic couplings to 75 per cent.

Electrification Planned—Mr. Abt says the electrification project is probably the most ambitious. By 1945 only about 1,250 miles of track were electrified throughout the U.S.S.R. The next five years, however, are expected to witness the conversion from steam on more than two and one-half times that mileage. A total of 1,300,000,000 rubles has been allocated to this portion of the plan. More than 1,860 miles of the track scheduled for conversion lies in the Ural mountains and in Siberia. The rich Krivoi Rog iron ore area and the Donbas coal region, both in the Ukraine, are to be connected by electrified track.

Production goals for locomotives and cars are listed in the plan as follows: Rolling stock shall be increased by the addition of 6,165 long-distance steam locomotives, 555 long-distance electric locomotives, 865 long-distance Diesel locomotives, 472,500 freight cars (in terms of two-axle cars) and 6,000 passenger coaches. . . . Damaged rolling stock shall be fully repaired and repairs to locomotives and cars improved. The locomotive and freight car repair shops destroyed during the [German] occupation shall be rebuilt and 11

new shops for the repair of steam locomotives, one for the repair of electric locomotives, one for the repair of Diesel locomotives, 11 car repair shops and three plants for the manufacture of parts shall be built. In 1946-50 the railways shall be supplied with 4,500,000 tons of rails, 2,000,000 tons of rail fastenings and 185,000,000 ties, and the production and laying of heavy rails shall be begun.

Elaboration of the foregoing statistics, Mr. Abt continues, indicates that 2,200 steam, 300 Diesel and 220 electric locomotives are to be constructed in 1950. These figures, he says, are well above maximum pre-war production. In 1935, when more locomotives were turned out than in any previous year, production totaled 1,518 steam, 34 electric and no Diesel engines. Freight car output for 1950 is also aimed at a new high. In 1935, a total of 90,800 freight cars (reduced units of two-axle cars) were produced. The 1950 goal is 146,000 units.

Speed-up Scheduled—The realization of the foregoing phases of the program will facilitate increased speed and shorter hauls, Mr. Abt says. The plan specifies that the freight car turn-around "shall be reduced from an average of 10.9 days in 1945 to an average of 7 days in 1950," and the average length of haul from 491 miles in 1945 to 429 miles in 1950. From the emphasis given it by Soviet officials, the 7-day turn-around appears to be one of the key points of the plan. Carloadings of freight are to reach 115,000 daily, an increase of more than 50,000 over 1945. The decrease in turn-around time must account for 62 per cent of this increase. The speed-up is to be effected by mechanizing 75 per cent of all loading and unloading work and especially by a reduction in idle time. It is even hoped that the 7-day figure may be reached in 1948-49.

A report of a speech by the minister of railways says that shortening the average journey of cars can free an additional 13,600 cars a day for loading; reduction of idle time to 16 hours during one loading operation can free 6,000 additional cars; reduction of idle time to 6.3 hours at one working station, 7,600 cars; increase of freight speed, 6,000 cars.

Before 1950, the minister estimates, 3,000,000 workers will have to be trained or re-trained to maintain this schedule, Mr. Abt says. About 30,000 of these are expected to be qualified annually by a chain of technical schools providing 2- and 3-year instruction courses. The establishment of an Academy of Transport is contemplated to prepare persons already in relatively high railway positions for executive responsibility. Houses with a living space of 5,500,000 square meters are to be made available to the railway workers.

Closely allied with the plan, although not technically a part of it, continues Mr. Abt, is the further decentralization of railway administrative responsibility. By a decree of May 21, 1946, the Council of Ministers has established five additional railway "okrugs," thus raising to ten the number of these administrative bodies charged with the enforcement of national railway policy in given areas. Falling as they do between the central government and the local operating officials, the okrugs will be expected to keep the aims of both in sight and to resolve the frequent conflicts between them.

What measure of success the plan will accomplish it is impossible to foretell, Mr. Abt concludes. Railway achievements under earlier plans in some cases have fallen short of expectations, but in others they have outdistanced them. Chairman Voznessensky of the State Planning Commission has said the railway program "must be unconditionally fulfilled in order to establish the most urgent and essential conditions for the restoration and development of the whole Soviet national economy."

Equipment Installed in 1946

Class I railroads put 40,377 freight cars and 563 locomotives in service in 1946, an increase of 1,390 cars but a decrease of 80 locomotives as compared with the number installed in 1945, according to the Association of American Railroads.

The new freight cars installed in 1946 included 14,740 plain box, 4,143 automobile, 5,511 gondolas, 14,379 hopper (of which 3,135 were covered hoppers), 524 flat and 1,080 refrigerator cars. New locomotives installed in 1946 included 83 steam and

* * *



A view of a few of the exhibits at the Indianapolis Industrial Exposition in the Union station, Indianapolis

480 Diesel-electrics, as compared with 109 steam, and 534 Diesel-electrics in 1945.

The Class I roads on January 1 had 63,829 new freight cars on order, as compared with 37,162 on order on January 1, 1946. The number on order on January 1 this year included 25,896 plain box, 6,040 automobile box, 4,705 gondolas, 15,273 hoppers, (of which 2,044 were covered hoppers), 9,651 refrigerator, 1,096 flat, 750 stock and 418 miscellaneous cars.

The railroads also had 604 locomotives on order on January 1 this year, including 64 steam, six electric, and 534 Diesel-electrics. On January 1, 1946, they had 471 locomotives on order, including 92 steam, six electric and 373 Diesel-electrics.

March N.R.A.A. Exhibit on Way to New Peak

(Continued from page 237)

National Lock Washer Company, Newark, N. J.
Nichols Engineering Company, Chicago
Nordberg Manufacturing Company, Milwaukee, Wis.

Northwestern Motor Company, Eau Claire, Wis.
Oxweld Railroad Service Company, Chicago
P. & M. Company, Chicago
Pittibone Mulliken Company, Chicago
Philadelphia Steel & Wire Corp., Philadelphia, Pa.

Pocket List of Railroad Officials, New York
Power Ballaster Company, Chicago
Rail Joint Company, New York
Railroad Products Company, Cincinnati, Ohio
Rails Company, New Haven, Conn.
Railway Age, Chicago
Railway Maintenance Corporation, Pittsburgh, Pa.

Railway Purchases & Stores, Chicago
Railway Track-Work Company, Philadelphia, Pa.
Ramapo Ajax division, American Brake Shoe Company, Chicago

Reade Manufacturing Company, Jersey City, N. J.

Republic Steel Company, Cleveland, Ohio
Ric-Wil Company, Cleveland, Ohio
Rust-Oleum Corporation, Evanston, Ill.
Schramm, Inc., West Chester, Pa.

Silent Hoist Winch & Crane Co., Brooklyn, N. Y.
Sperry Products, Inc., Hoboken, N. J.
Taylor-Colquitt Company, Spartenburg, S. C.

Teleweld, Inc., Chicago
Templeton, Kenly & Co., Chicago
Thornley Railway Machine Company, Joliet, Ill.
Timber Engineering Company, Washington, D. C.

Warner & Swasey Co., Gradall division, Cleveland, Ohio
Winpower Manufacturing Company, Newton, Iowa

Woodings-Verona Tool Works, Verona, Pa.
Wooley Machine Company, Minneapolis, Minn.
Worthington Pump & Machinery Corp., Holyoke, Mass.

"Keep 'Em Moving" Is Kendall's Answer

(Continued from page 237)

loadings fell off as a result of last month's coal strike were all required for other traffic; and this type of equipment is still carrying lumber and prefabricated housing units from the Pacific Northwest. Also, there are heavy demands for gondolas in the South and Southwest to haul road building and construction materials. Meanwhile, the sugar beet movement was practically completed by the end of the year, the crops having been handled "successfully without any car shortage through the splendid cooperation of shippers, receivers, and the railroads."

More Covered Hoppers—Since the first of the year, the demand for flat cars

in the Pacific Northwest has eased sufficiently to permit temporary discontinuance of the movement of empty flats into that area.

At the same time, total loadings of flats continue "well ahead of last year's." Demands for covered hoppers "continues heavy and all cars which can be spared are temporarily assigned for the movement of export grain." Mr. Kendall noted that railroads had on order January 1, 2,044 covered hoppers after having added 3,135, an increase of 30 per cent, to their ownership during 1946.

With respect to refrigerator cars, the C. S. D. chairman cited estimates which indicate that there will be an increased demand during January and for the remainder of the winter months. "None of the loading territories," he added, "have any excess in car supply and if heavy loading is to be protected currently it will be necessary that refrigerator cars be given prompt handling by shippers, receivers and carriers." As to l.c.l., that traffic "continues at high record levels." While there was some increase in cars held at freight-houses immediately following the holidays, "the situation subsequently has improved and only a comparatively small number of points are now more than a day behind."

The usual turn-around-time and detention reports indicated that the turn-around time for all freight cars in December was 15.78 days, compared with November's 14.26 days. There was also an increase in the percentage of cars detained in excess of the free time, the December figure being 18.14 per cent as compared with November's 16.35 per cent. For the year 1946 the average detention was 17.78 per cent which compares with 16.13 per cent for 1945.

International Harvester Truck Division Marks Birthday

A new line of trucks consisting of 21 basic models, many of which are adaptable to railway use, was introduced by the International Harvester Company at a celebration at Fort Wayne, Ind., on January 17, marking the company's fortieth year in the truck manufacturing field.

Present for the presentation and celebration were representatives from the press



International Model KB-1 one-half-ton truck with pick-up body, one of 21 new models

from all parts of the United States, a large group of Harvester officials, and local civic and industrial leaders. A feature of the celebration was a historical review of International's progress as a truck manufacturer, from the company's earliest experiments with combustion engines in the early 1890's until the present.

Club Meetings

A meeting of the Indianapolis Car Inspection Association will be held on February 3 at the Indianapolis Union Station at 7 p.m. A discussion of the new A. A. R. rules for 1947 will be held.

The New England Railroad Club has scheduled a meeting on February 11 at 6:30 p.m. at the Hotel Vendome, Boston. J. S. Fair, Jr., purchasing agent of the Pennsylvania, will speak on "A Review of the Fundamentals of Purchasing."

The Western Railway Club will meet at the Hotel Sherman, Chicago, on February 17 at 6 p.m. John Snyder, secretary of the treasury, will be the guest speaker.

A social meeting of the Toronto Railway Club has been scheduled for February 25 at 8:30 p.m. at the Royal York hotel, Toronto.

The annual dinner meeting of the Traffic Club of Cleveland will be held at the Hotel Cleveland, Cleveland, on February 13.

The annual meeting of the Society for Experimental Stress Analysis has been scheduled for May 15-17 inclusive, at the Stevens hotel, Chicago. The program will include a symposium on shock and impact

Lackawanna Speeds Schedules as Diesels Go in Service

The running time of four Delaware, Lackawanna & Western trains between Hoboken, N. J., and Buffalo N. Y., with connecting service to and from Cleveland, Ohio, and Chicago over the New York, Chicago & St. Louis, will be reduced nearly an hour, effective January 26. The Lackawanna will assign Diesel-electric locomotives between Hoboken and Buffalo to haul the "Lackawanna Limited" (in both directions), the "Westerner" and the "New Yorker."

The running time westbound will be reduced by 55 minutes to Buffalo, and an hour will be saved by "Lackawanna Limited" passengers to Chicago. Time of the eastbound trains will be reduced by 45 minutes between Buffalo and Hoboken.

Two 4,500-hp. Diesel passenger locomotives were delivered to the Lackawanna late in December. On the new schedules they will be operated in turnaround service, about 800 miles daily. One Diesel will haul the "Lackawanna Limited" on the day run to Buffalo, returning on the overnight run of the "New Yorker." The other Diesel making the eastbound trip on the "Limited" will return to Buffalo on the overnight run of the "Westerner." On the new schedules the "Lackawanna Limited" will leave Hoboken at 10:30 a.m., while the "Westerner" will depart at 8:45 p.m. The eastbound "Limited" will leave Buffalo at 9:45 a.m., and the "New Yorker" will depart at 11 p.m.

With the Government Agencies

Water-Competitive Rate Action Talked

Railroads urge protesting
ship lines to file proposals
with commission

Refusal by the respondent railroads and water carriers to submit proposed rate increases on transcontinental rail and intercoastal water traffic, respectively, and a request by Harry S. Brown, chairman of the Intercoastal Steamship Freight Association, that hearings in connection with the Interstate Commerce Commission's investigations of such rates start "within 45 days" at Washington, D. C., marked the pre-hearing conference on the investigations (Docket Nos. 29663 and 29664) at Washington on January 17. Commissioner Alldredge presided, assisted by Examiners Hosmer, Colgren and McCloud.

The railroads' position was summarized by H. C. Barron, counsel for the Western Traffic Executive Committee, who said that the rail lines have "long considered and still consider the transcontinental rate structure subnormal by reason of intercoastal competition and the necessity of less-than-normal reasonable maximum rates in order to develop long haul traffic, particularly for lines between the Missouri river and Pacific Coast states which pass over a territory of very little traffic-producing possibilities." He added, however, that the railroads are not suggesting any changes "at this time."

Mr. Barron said that it is the railroads' proposal that the intercoastal water lines and the United States Maritime Commission, whose authority to operate as a common or contract carrier by water in coastwise or intercoastal service between points on the Atlantic, Pacific and Gulf of Mexico coasts expires on March 1, file with the I.C.C. and make public "within 30 or 60 days" rates which they consider "necessary" to enable them to operate successfully. He added that such a proposal should be in tariff form or "otherwise showing item by item" their proposed new rates. At the same time, Mr. Barron said that the suggested "tariff" should be accompanied by a statement showing the water carriers' rates as of June 30, 1946, in addition to their present rates, their proposed rates and a brief explanation of the bases for the proposed increases.

Continuing, Mr. Barron said that the railroads, "within a reasonable time" after receipt of the water carriers' proposed rates, would file with the I.C.C. in a "similar form" such rates as the railroads would desire to establish "all rail" in the event the water carriers' proposed increased rates became effective.

Contending that the general rate struc-

ture of the transcontinental railroads is unlawful, that it ignores many rate-making factors and that intercoastal trade cannot survive unless its rates are increased, Mr. Brown said that it was the water carriers' hope that the I.C.C. will require the "unreasonably low" transcontinental rail rates to be increased. He declared that the water carriers would match "penny for penny" any increase the railroads may file "at this time."

Meanwhile Mr. Brown had suggested that the railroads inform the I.C.C. and the water carriers as to what they might be willing to do in the way of increasing their transcontinental rates. If the railroads do that, he said, he would recommend that the water carriers increase their rates to a point which would restore the "competitive relationship" which existed between the transcontinental railroads and the intercoastal carriers in "early 1940."

J. S. Burchmore, representing the National Industrial Traffic League, said he objected to the "direction which the proceedings seemed to be tending." He said that both the railroads and water carriers were "enticing each other" with respect to the proposed rate adjustments and that the result would be detrimental to shippers. Commissioner Alldredge announced that the commission would not grant interim relief to the water carriers prior to the hearings.

Would Study Desirability of Selling "Inch" Pipe Lines

Senator Hawkes, Republican of New Jersey, has introduced Senate Resolution 62 which would direct the Senate committee on interstate and foreign commerce to "make a complete study and investigation of the desirability of disposing of the Big Inch and Little Big Inch pipe lines to private ownership, the reasonable price to be charged for such pipe lines and the necessary facilities in connection therewith, the use to which such pipe lines should be put when privately owned, and such other pertinent matters in connection therewith as the committee deems advisable."

The committee would be directed to report its findings to the Senate not later than June 1. To allow time for his proposed study, Senator Hawkes has also introduced Senate Joint Resolution 40 to prohibit sale of the pipe lines for six months after February 3. On the House side the committee on interstate and foreign commerce was this week holding hearings on the resolution (H. J. Res. 2) introduced by Representative Walter, Democrat of Pennsylvania, to prohibit sale of the pipe lines until six months after the final report and recommendation of the Federal Power Commission in its Docket No. G-580 (the general "fact-finding survey" of the natural gas situation) have been submitted to Congress.

"Haste" on Reed Bill Protested by Young

Says new rail association will
have "definite ideas" on
anti-trust measure

The Senate committee on interstate and foreign commerce recessed "subject to call" on January 21, following that day's hearings on S.110, the bill introduced by Senator Reed, Republican of Kansas, to stay the operation of anti-trust laws with respect to carrier rate-making procedures and other joint actions approved by the Interstate Commerce Commission. As noted in *Railway Age* of January 18, page 205, Senator Reed's bill is an amended version of H.R.-2536, the so-called Bulwinkle Bill, which was favorably reported from the Senate committee last year and then left to die on the calendar.

While the hearing was in session, the committee received from Robert R. Young, chairman of the Chesapeake & Ohio, a telegram in which Mr. Young stated that the "new railroad association" which he plans to organize would have "very definite ideas to present to Congress on the extent to which collaboration on rates and other competitive factors should be and should not be exempted from prosecution under the anti-trust laws." The telegram, sent from New York, went on to ask that the "new association" be heard before the committee votes "on this subject of such vital importance to American industry and American defense." It also asserted that the bill is of "such importance" that "it should not be dealt with hastily as announced a few weeks ago."

Young Invited to Testify—Senator Reed, acting committee chairman at the hearing, immediately wired Mr. Young to the effect that the committee would hear him the following day, January 22. On that day, however, the committee received a telegram from the C. & O. offices in Cleveland, O., which said that Mr. Young was en route to Tallahassee, Fla., and that the C. & O. was unable to reach him to deliver the committee's message.

The railroads' position with respect to S.110 was summarized by J. Carter Fort, vice president and general counsel of the Association of American Railroads, who told the committee that "it is difficult to recall any proposed legislation dealing with transportation in connection with which there is such unanimity in the informed views of those affected." Noting that S.110 has been endorsed by various interests and agencies, including the Interstate Commerce Commission, the Office of Defense Transportation, shipping and farming groups and state regulatory commissions,

Mr. Fort declared that such "overwhelming support" of the measure demonstrated the need for legislation "to provide a statesmanlike and workable method of administering the anti-trust laws as they apply to regulated transportation."

Emphasizing that the railroads and other common carriers must confer between and among themselves and with shippers with respect to rates and services in order properly to serve the needs of the nation and maintain reasonable and non-discriminatory rates, Mr. Fort explained that S.110 "simply provides that the anti-trust laws shall not be construed as forbidding agreements between carriers if such agreements are consistent with the national transportation policy . . . and if the . . . commission has found these agreements will not unduly restrain competition and are consistent with the national transportation policy."

Denying that the bill would exempt the railroads or other carriers from the operation of the anti-trust laws, or that it would reduce "proper government supervision" of transportation, Mr. Fort said, in turn, that it would "harmonize and reconcile the policy of the anti-trust laws and the national transportation policy in such fashion as to provide adequate and effective supervision."

Not Unprecedented—"It is not a railroad bill, a motor carrier bill or a water carrier bill, as it applies to all of these carriers, and it is not an unprecedented bill, as Congress has already adopted similar measures with reference to air carriers and overseas shipping," he continued. "Because the railroads form an interlacing system of transportation throughout the United States . . . railroad rates are necessarily interdependent and interrelated. For this reason, the question of whether or not a railroad rate is discriminatory can be determined only by considering that rate with relation

to others. The same thing is also true, to a large extent, in determining the reasonableness of a rate.

"Thus, the requirement of the law that rates be reasonable and non-discriminatory cannot be complied with by considering individual rates with a disregard of the rate structure of which the individual rates are an integral part. It follows . . . that reasonable and properly related rates, in accordance with the requirements of the statute, can be established in no other way except by consultation and conference between the carriers and shippers. Under the terms of the . . . bill, the Interstate Commerce Commission would have the authority to draw a line of demarcation between collective agencies which are permissible under the anti-trust laws and those which are not."

Clyde B. Aitchison, chairman of the I. C. C., told the committee that the commission still considered the bill "satisfactory," although he said that the I. C. C. has renewed its recommendation that provisions be made for reports by the rate bureaus and carrier associations and for the inspection of their records. He also referred to the I. C. C.'s annual report, reviewed elsewhere in this issue of *Railway Age*, in which the commission recommended that "Congress, by appropriate legislation, remove the continuing uncertainty concerning the legality of joint action by carriers and freight forwarders subject to the Interstate Commerce Act, exercised through rate bureaus and conferences."

Johnson Belittles "Assurances"—Colonel J. Monroe Johnson, director of the O. D. T., said that the expiration on October 1, 1946, of Certificate No. 44, necessitates immediate enactment of S.110.

"The expiration of the certificate has removed war-time immunity and exposes common carriers to civil and criminal pro-

ceedings under the anti-trust statutes," he explained. "I am aware of a written statement by an assistant attorney general, made since Certificate No. 44 expired, to the effect that the Department of Justice does not plan, in the absence of unusual circumstances, to institute additional anti-trust suits based on the same issues presented in the so-called Georgia and Lincoln cases and involving only actions occurring prior to the time when the issues have been adjudicated in one of those cases. But plans are subject to change, as are incumbents who make such plans, and it seems to me unfair to the common carrier industry of the country to allow the situation to rest on such a tenuous basis. The merits of the proposed legislation have received full endorsement of shippers, regulatory commissions and regulated carriers. Its enactment, in my judgment, should not long be delayed."

Others who also testified in favor of the bill included John H. Eisenhart, Jr., representing the American Waterways Operators; K. C. Batchelder, traffic manager, West Coast Lumbermen's Association; Carl Giessow, president, National Association of Shippers Advisory Boards; John P. Nye, secretary-treasurer, American Short Line Railroad Association; Roland Rice, general counsel, American Trucking Associations; Giles Morrow, general counsel, Freight Forwarders Institute; F. G. Hamley, general solicitor, National Association of Railroad & Utilities Commissioners; F. F. Estes, vice-chairman, legislative committee, National Industrial Traffic League; J. T. Corbett, national legislative representative, Brotherhood of Locomotive Engineers; Barber Hartman, general representative, Brotherhood of Railway Clerks; Jack G. Scott, general counsel, National Association of Motor Bus Operators; and J. C. Winter chief, Transportation Facilities Division, marketing facilities branch, Department of Agriculture.

Calls for "People's" View—Response by committee members to the proponents' testimony was led by Senator Tobey, Republican of New Hampshire, who wanted to know "who spoke for the people?" Senator Tobey also criticized the organization and practices of the A. A. R. and other trade associations, charging that they influenced the operations and decisions of rate bureaus and similar carrier conferences. "The welfare of the people should be the controlling factor in this legislation," he declared.

Senator McFarland, Democrat of Arizona, also expressed the opinion that the committee was "acting too hastily."

Opposition to the bill was centered around the testimony of Department of Justice representatives, including Wendell Berge, assistant attorney general in charge of the department's Anti-trust Division, and James E. Kilday, chief of the division's transportation section.

In addition to his own 19-page statement, Mr. Berge also read a statement for Attorney General Tom C. Clark, who asserted that enactment of S.110 would foster "powerful groups" which would destroy the transportation industry. Mr. Clark said that it would be unfair to immunize the transportation industry from anti-trust laws while still subjecting other industries to prosecution.



P. J. Speicher (left) and J. W. Brauns of the General Electric Company examine the Charles A. Coffin Foundation Award certificates they received for outstanding achievement in the development of that company's industrial Diesel-electric switching locomotives. Mr. Brauns is manager of the industrial haulage division of the transportation divisions and Mr. Speicher is on the staff of the locomotive engineering division of the Erie (Pa.) works.

Clark for "Competition"—Noting that President Truman called for the enforcement of the anti-trust laws and the retention of free enterprise in his "state-of-the-union" message to Congress earlier this month, Mr. Clark said that competition must remain in the transportation industry in order to prevent it from turning from a "free enterprise to regimentation." He warned that should the transportation industry be exempted from anti-trust legislation, other industries will seek congressional legislation to the same effect.

Mr. Clark's statement was termed "quite an excellent political speech" by Senator Reed.

Mr. Berge told the committee, in part, that passage of S.110 would "work a reversal of the statutory scheme" of regulation provided in the Interstate Commerce Act to preserve a broad area for the interplay of competition in the determination of transportation charges. He urged the committee to withhold action on the measure until decisions had been reached in the pending anti-trust cases instituted by the government in the district court at Lincoln, Neb., and by the state of Georgia in the Supreme Court of the United States. "If the decision of the Supreme Court is unreasonable in the minds of Congress, then Congress can correct the law," he said.

Also testifying in opposition to the bill were Arne C. Wiprud, former chief of the Anti-trust Division's transportation section, and Russell Smith, legislative secretary, National Farmers Union.

Car Service Orders

Interstate Commerce Commission Service Order 668, effective from January 31 until March 31 unless otherwise modified, appoints E. W. Coughlin, 59 East Van Buren street, Chicago, commission agent with authority to divert or reroute loaded freight cars in the area embracing New England, New York, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia, Virginia, West Virginia, Ohio, Indiana, Illinois, Kentucky, and the lower peninsula of Michigan. The order was issued because it appeared to the commission "that there is congestion of railroad traffic and loaded cars are not being transported with maximum efficiency to best promote the service in the interest of the public."

Revised Service Order No. 620 will prohibit the light-weighting of cars intended for loading with imported commodities at any Atlantic, Gulf or Pacific port. Effective from January 31 until May 10 unless otherwise modified, the revised order will supersede on the former date Service Order No. 620 which prohibits the light-weighting of certain box cars at Boston, Mass., and which has meanwhile been extended beyond its previous expiration date of January 18.

Service Order No. 422-A suspends Service Order No. 422 which has required railroads to unload forthwith cars on hand 10 days from arrival date where the unloading is a railroad responsibility. The suspension order is effective from January 20 until April 10, the latter being the date on which the order is scheduled to expire.

Service Order No. 647-B, effective January 15, suspended Revised Service Order No. 647 which had maintained the priority

Western Anti-Trust Suit to Be Heard April 23

April 23 has been set by Federal Judge John M. Delehant as the date to begin hearings in the federal government's anti-trust suit against 47 western railroads, 90 railway and banking officers and two railway associations. The April 23 hearing is expected to be devoted primarily to the presentation, by the Department of Justice, of documentary evidence by which it seeks to support its charge that the defendants conspired to monopolize transportation and to maintain noncompetitive rates in the western part of the United States. The government is not expected to offer any oral testimony at this time. Because of the voluminous nature of the exhibits which the government is reported to be planning to introduce in evidence, attorneys for the railroads expect to ask for a lengthy recess in the hearings to permit its analysis.

system on foreign-relief grain offered for loading at points in Oregon, Washington, Idaho and western Montana.

The Office of Defense Transportation on January 10 issued Amendment 1 to General Permit ODT 1, Revised-9, to broaden its authorization for the shipment of portable heaters in refrigerator cars. The amendment stipulates that railroads may move, between any points in the country, reefers loaded exclusively with portable heaters used in the protection of shipments by rail, "if such car would otherwise move empty."

Turner Leaves O. D. T.

L. C. Turner, director of the Waterway Transport department of the Office of Defense Transportation, has resigned effective January 15 to become president of the Great Lakes Towing Company with headquarters at Cleveland, Ohio.

As noted in the *Railway Age* of December 21, 1946, page 1060, that company was recently released from government control after it had been operated by O. D. T. with Mr. Turner as federal manager, since November, 1945, when it was taken over during a strike. Mr. Turner has been with O. D. T. since September, 1942, and prior to that time he was president of American Agencies, Ltd., a New Orleans, La., steamship agency.

December Employment

Railroad employment decreased 2.07 per cent—from 1,381,977 to 1,353,389—during the one-month period from mid-November, 1946, to mid-December, 1946, and the mid-December total was 3.12 per cent under that of December, 1945, according to the preliminary summary prepared by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The index number, based on the 1935-39 average, was 134.7 for December, as

compared with 134.2 for the previous month and 139.1 for December, 1945.

December employment was above that of the corresponding 1945 month in only one group—transportation, other than train engine and yard—in which the increase was 2.12 per cent. The decreases ranged from 0.36 per cent in the executives, officials and staff assistants category to 8.63 per cent in the maintenance of way and structures group.

As compared with the previous month, there were employment increases last December of 0.05 per cent in the executives, officials and staff assistants group and 0.02 per cent in the transportation, other than train, engine and yard category. The decreases ranged from 0.29 per cent in professional, clerical and general to 5.32 per cent in maintenance of way and structures.

Victorian Railways Map Their Plans for Improved Facilities

In order to provide increased comfort for rail travelers to country areas of Australia 20 new passenger cars are being built by the Victorian Railways. The cars are being constructed of special steel, and will be air-conditioned and luxuriously equipped. They are part of the 1946-47 rolling stock construction program planned by the railroad.

Considerable improvements in branch line service are expected when modern Diesel rail motors, now on order, are delivered. Orders have been placed for twelve 100-hp. motors and six 150-hp. motors, with six trailers.

I. C. C. Decision on Forwarder Interests of Carrier Officers

Conflicting provisions of the Interstate Commerce Act's sections 411(c) and 411(g) have been interpreted by Division 4 of the Interstate Commerce Commission in a report in the Ex Parte No. 155 investigation of the ownership by common-carrier officers of stock in freight forwarders. The proceeding was instituted in May, 1943, and the proposed report by the commission's Bureau of Water Carriers and Freight Forwarders was issued in March, 1944, as noted in the *Railway Age* of March 18, 1944, page 573.

Section 411(c) makes it unlawful for any director, officer, employee or agent of a common carrier, or any person controlling, controlled by, or under common control with a common carrier, to have any interest in a freight forwarder, except director's qualifying shares "from which no pecuniary benefit is derived by the holder." Section 411(g), on the other hand, stipulates that nothing in the act shall be construed to make it unlawful for any common carrier, or any person controlling a common carrier, to have or acquire control of a freight forwarder.

As noted in this issue's review of the commission's annual report, the legislative recommendations therein repeat previous commission suggestions that section 411(c) be amended to permit carrier employees, officers, directors, etc., to have interests in forwarders upon authorization by the commission; and legislation to that effect is embodied in S.290, which has been intro-

Selected Income and Balance-Sheet Items of Class I Steam Railways

Compiled from 129 reports (Form IBS) representing 133 steam railways
(Switching and Terminal Companies Not Included)

Income Items	All Class I Railways			
	For the month of October		For the ten months of	
	1946	1945	1946	1945
1. Net railway operating income	\$85,118,940	\$52,414,334	\$450,730,006	\$830,561,048
2. Other income	16,059,699	14,614,420	147,424,800	152,306,432
3. Total income	101,178,639	67,028,754	598,154,806	982,867,480
4. Miscellaneous deductions from income	2,434,285	1,274,926	24,353,486	25,327,746
5. Income available for fixed charges	98,744,354	65,753,828	573,801,320	957,539,734
6. Fixed charges:				
6-01. Rent for leased roads and equipment	10,266,654	11,974,029	98,918,268	121,047,312
6-02. Interest deductions ¹	27,739,261	32,026,456	289,954,743	313,111,262
6-03. Other deductions	123,322	114,832	1,221,997	1,118,244
6-04. Total fixed charges	38,129,237	44,115,317	390,095,008	435,276,818
7. Income after fixed charges	60,615,117	21,638,511	183,706,312	522,262,916
8. Contingent charges	3,335,603	2,413,647	29,861,811	31,873,628
9. Net income ²	57,279,514	19,224,864	153,844,501	490,389,288
10. Depreciation (Way and structures and equipment)	28,420,063	28,162,612	284,304,599	277,786,420
11. Amortization of defense projects	1,083,441	109,945,503	8,068,816	391,227,824
12. Federal income taxes	8,275,597	*34,274,688	52,606,400	668,046,301
13. Dividend appropriations:				
On common stock	3,828,360	18,898,771	122,921,938	122,911,366
On preferred stock	6,173,905	9,168,199	36,846,900	36,346,063
Ratio of income to fixed charges (Item 5÷6-04)	2.59	1.49	1.47	2.20

Selected Asset and Liability Items	All Class I Railways	
	Balance at end of October	
	1946	1945
17. Expenditures (gross) for additions and betterments—Road	\$181,829,837	\$190,889,015
18. Expenditures (gross) for additions and betterments—Equipment	240,796,134	232,802,700
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	581,210,215	543,428,361
20. Other unadjusted debits	175,462,586	197,892,966
21. Cash	1,015,927,335	1,220,089,623
22. Temporary cash investments	1,201,006,071	1,733,563,192
23. Special deposits	195,928,142	205,231,617
24. Loans and bills receivable	338,385	519,570
25. Traffic and car-service balances—Dr.	61,943,605	41,345,187
26. Net balance receivable from agents and conductors	123,584,399	111,072,753
27. Miscellaneous accounts receivable	314,905,040	542,470,262
28. Materials and supplies	650,630,251	603,640,208
29. Interest and dividends receivable	20,477,608	34,909,956
30. Accrued accounts receivable	167,096,092	268,663,631
31. Other current assets	32,097,298	54,038,045
32. Total current assets (items 21 to 31)	3,783,934,226	4,815,544,044
40. Funded debt maturing within 6 months ³	94,880,031	168,410,512
41. Loans and bills payable	10,752,487	11,361,361
42. Traffic and car-service balances—Cr.	107,667,538	150,669,138
43. Audited accounts and wages payable	502,719,012	444,893,423
44. Miscellaneous accounts payable	186,430,218	194,881,549
45. Interest matured unpaid	67,593,334	64,780,608
46. Dividends matured unpaid	4,183,862	3,756,834
47. Unmatured interest accrued	63,188,423	58,423,838
48. Unmatured dividends declared	17,788,763	29,625,235
49. Accrued accounts payable	185,746,049	213,724,230
50. Taxes accrued	587,974,119	1,402,352,324
51. Other current liabilities	110,784,156	125,776,831
52. Total current liabilities (items 41 to 51)	1,844,827,961	2,700,245,371
53. Analysis of taxes accrued:		
U. S. Government taxes	446,399,785	1,241,084,332
Other than U. S. Government taxes	141,574,334	161,267,992
54. Other unadjusted credits	393,802,873	409,187,346

¹ Represents accruals, including the amount in default.

² After deduction of the following amounts to create reserves for land grant deductions in dispute: October 1946, \$794,133; October 1945, \$2,896,458; 10 months of 1946, \$3,290,008; 10 months of 1945, \$39,045,911.

³ Includes payments of principal of long-term debt (other than long-term debt in default) which will become due within six months after close of month of report.

* Decrease or deficit.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

duced in the Senate by Chairman White of the committee on interstate and foreign commerce. Meanwhile, Division 4's present report resolves the conflict in favor of section 411(g).

It holds in effect that if an officer of a carrier is also the person controlling that carrier he may hold stock in a forwarder, provided such holdings amount to a controlling interest. On the other hand, such a person may not hold a minority interest in a forwarder. "We conclude," the commission said, "that section 411(g) is to be interpreted as permitting one who controls a carrier, including an officer thereof, also to control a forwarder, notwithstanding the provision of section 411(c) making it

unlawful for an officer of a carrier to own, lease, control, or hold stock in a freight forwarder. . . . Insofar as . . . ownership of a minority interest . . . is concerned, there is no conflict between sections 411(c) and (g), for the latter provision is applicable only where a person controlling a carrier has or acquires 'control' of a forwarder. . . . It follows therefore that [a person] may not at the same time be an officer of a common carrier . . . and the holder of a minority interest in [a forwarder]."

Applying the foregoing to the 18 respondents in the proceeding the commission issued divestment orders against only two—H. F. Snure of Detroit, Mich., and Fisher G. Dorsey of Houston, Tex. The

former, president of American Carloading Corporation, a trucker, is required to dispose of his minority holdings of stock in the United States Freight Company, which controls the Universal Carloading & Distributing Co., a forwarder; but he is allowed to retain his interest in American Freight Forwarding Corporation, a forwarder which he controls. Likewise Mr. Dorsey, who is president of Union Transfer & Storage Co., a trucker, is required to sell his minority interest in Lone Star Package Car Company, a forwarder; but he is allowed to retain his interest in the Bluebonnet Freight Forwarding Company, a forwarder which he controls. The proceeding was held open with respect to three other respondents and dismissed as to the remaining 13.

December Operating Revenues 2.7 Per Cent Above 1945

From preliminary reports of 84 Class I railroads representing 80.8 per cent of total operating revenues, the Association of American Railroads has estimated that the December, 1946, gross amounted to \$509,227,234, an increase of 2.7 per cent above the \$495,607,381 reported for the same 1945 month. Estimated December freight revenues were \$391,908,577, compared with \$322,076,507, an increase of 21.7 per cent, while estimated passenger revenues were \$76,742,742, compared with \$131,539,666, a decrease of 41.7 per cent. The estimate for all other revenues is \$40,575,915, a decrease of 3.4 per cent from December, 1945's \$41,991,208.

Transport Tax Exemptions of Government—Correction

The story entitled "Hostilities' End Will Cut Fare Tax Back to 10 Per Cent," which appeared on page 156 of the *Railway Age* of January 11, was in error in its statement that President Truman's recent order proclaiming the "cessation of hostilities" would result in the termination on July 1 of government-agency exemptions from the taxes on amounts paid for passenger and freight transportation. These exemptions, which are authorized by the Secretary of Treasury, will remain in effect.

Women Railway Employees

Class I railways had 75,860 women employees as of the middle of October, 1946, a decrease of 1,692 from the mid-July, 1946, total of 77,552, and the proportion of women employees to total employees fell from 5.75 per cent to 5.51 per cent, according to the latest report on the subject by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission.

The total of 75,860 women employees as of the middle of last October compares with an October, 1945, figure of 109,424. The totals of all employees at the same times were 1,376,245 and 1,396,703, respectively.

As compared with mid-July, 1946, there were declines in the mid-October figures for women employees in practically every employment group. The largest number continues to be included in the professional, clerical and general category, for which the

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mid-October total was 58,876, as compared with mid-July's 60,039. There were 8,277 women employed in maintenance of equipment and stores as compared to 8,089 in mid-October, 8,357 as compared to 9,009 in transportation work, other than train, engine and yard service, and 225 as compared to 260 in maintenance of way and structures.

At mid-October, 20 women were employed as executives, officials or staff assistants, 25 as switchtenders and 80 in train and engine service.

November Accident Statistics

The Interstate Commerce Commission has made public its Bureau of Transport Economics and Statistics' preliminary summary of steam railway accidents for November, 1946, and last year's first 11 months. The compilation which is subject to revision, follows:

Item	Month of November		11 months ended with November	
	1946	1945	1946	1945
Number of train accidents*	1,322	1,227	14,108	15,307
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed	132	90	1,437	1,438
Injured	81	87	1,067	1,109
Passengers on trains:				
(a) In train accidents*				
Killed .....	...	...	51	59
Injured	81	127	1,343	1,657
(b) In train-service accidents				
Killed	4	5	38	61
Injured	249	230	2,757	2,524
Travelers not on trains:				
Killed	1	1	15	11
Injured	86	81	945	979
Employees on duty:				
Killed	59	78	609	794
Injured	3,033	3,709	34,981	42,965
All other nontrespassers:**				
Killed	166	195	1,778	1,845
Injured	565	668	5,956	6,255
Total—All classes of persons:				
Killed	362	369	3,928	4,208
Injured	4,095	4,902	47,049	55,489

* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than \$150 to railway property.

** Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties for all classes of persons, including both trespassers and nontrespassers, were as follows:

Persons:				
Killed	165	178	1,632	1,643
Injured	376	503	3,780	3,808

Senate Bills Would Carry Out I. C. C. Recommendations

Many legislative recommendations of the Interstate Commerce Commission's annual report, including provision for voluntary readjustments of railroad financial structures, are proposed in two bills which Chairman White of the Senate committee on interstate and foreign commerce has introduced "by request." The bills are S.249 and S.290.

The former would set up the voluntary revamp procedures, which, as the commission recommended, would be embodied in a new section (20b) of the Interstate Commerce Act, with their applicability limited to roads not undergoing reorganization in equity receiverships or proceedings under section 77 of the Bankruptcy Act.

S.290 proposes various other Interstate Commerce Act amendments which the commission wants, including the extension to carrier associations of its authority to require reports and inspect records, and changes in section 20(6) to make it applicable to the records of persons "which directly or indirectly through rental agreements with shippers or otherwise furnish cars to or for use by any carrier by railroad or express company." Among other provisions of the bill are those which would amend section 5(2) to eliminate the requirement that a public hearing be held in all merger and acquisition cases where carriers by railroad are involved; amend section 3(2) to give the commission authority to prescribe rules for the extension of credit by express companies; and modify provisions relating to service of notice to ease the commission's work in that respect.

War Assets Offers Six Surplus Locomotives for Sale

Six 4-6-6-4 simplex articulated Mallet, standard-gage, steam locomotives, formerly used to haul war freight over the Rocky mountains, are being offered for sale as surplus by the War Assets Administration. Sealed bids will be received at the Washington, D. C., office of the W.A.A. until January 28.

According to the W.A.A., the locomotives, which may be inspected at the Salt Lake City, Utah, yards of the Denver & Rio Grande Western, originally cost the government \$282,814 each, and are of such design that they are not readily adaptable to all railroads.

Won't Alter Interpretation of Intermediate Point Rule

The Interstate Commerce Commission has denied petitions for reconsideration of the 1945 decision in which it upheld railroad contentions to resolve a controversy over the proper interpretation of tariffs where a shipper claimed a destination intermediate-point rule applied and the carriers contended that combinations of proportional commodity rates were controlling. The proceeding is docketed as No. 28552, Swift & Company v. Alton, and the commission's 1945 report found that the aggregates of specific proportional commodity rate factors constituted commodity rates and therefore were applicable, as the railroads contended, to the exclusion of the rates made by the intermediate rule (see *Railway Age* of August 25, 1945, page 342).

The case grew out of Swift's complaint against rates charged on certain carload shipments of fresh meat and packing house products to Cincinnati, Ohio, from points west of the Mississippi river. The commission's order denying the petitions for reconsideration was dated December 18, 1946, and made public last week. It was accompanied by a supplemental report which the commission was prompted to make because of "the broad misconception apparent in the present petitions concerning the effect, not only of the present decision, but of other decisions, and pertinent rules of tariff construction."

Commissioner Alldredge, who was with

the majority on the original decision, changed his mind, after further consideration in the light of the petitions, and this time filed a separate dissenting expression. This Alldredge shift was offset when Commissioner Lee, too, changed his mind. The latter had joined in Commissioner Aitchison's dissent to the original decision, but this time he noted his concurrence "in the result generally" of the majority report, but not in its reasoning. Mr. Aitchison remained a dissenter while Commissioner Miller noted again his concurrence in the result of the majority report. Commissioner Barnard "being necessarily absent," did not participate.

R. E. A. Seeks Certificates for Air Services

The Railway Express Agency has filed with the Civil Aeronautics Board four applications for certificates of public convenience and necessity authorizing it "to indirectly engage in the air transportation of property" through the use of certificated scheduled air carriers and non-certificated or non-scheduled lines on all domestic routes and on international routes to and from this country. The applications seek permanent or temporary certificates under the Civil Aeronautics Act's section 401, at the same time making alternative requests for "an order of exemption or otherwise authorizing such operations."

R. E. A. is conducting its present air services under a temporary exemption granted by C. A. B. on March 13, 1941. The exemption is subject to revocation at any time; and C. A. B. last year took occasion to suggest to the Express Agency that the time may have arrived when the latter should apply for certificates pursuant to the provisions of section 401. (See *Railway Age* of June 15, 1946, page 1194.)

The four applications now filed have C. A. B. docket numbers 2744 to 2747, inclusive. The first two relate to domestic service—one seeking authority to perform it through the use of scheduled air lines and the other through the use of non-scheduled carriers. The other two seek like authorizations with respect to the proposed foreign services.

1947 Signal Section Meeting

The 49th annual meeting of the Signal section of the Association of American Railroads will be held at the Edgewater Beach hotel, in Chicago, on Thursday, Friday and Saturday, September 11, 12 and 13.

Court Fixes Jurisdiction of Adjustment Board Divisions

Resolving a jurisdictional dispute on the National Railroad Adjustment Board, the United States Supreme Court last week upheld lower court decisions which had ruled that the board's Fourth division has jurisdiction over yardmasters. The Order of Railway Conductors and Brotherhood of Railroad Trainmen had contended that yardmaster disputes should go to the board's First division, while the Railroad Yardmasters of America favored the assignment to the Fourth division.

Meanwhile, members of the two divisions

were split evenly on the dispute, the carrier members claiming that the Fourth division had jurisdiction while the labor members favored the First division. The Supreme Court found that yardmasters could not be classified among the "yard service employees" whose disputes go to the First division, and thus their cases fall within the Fourth division's "catch-all" jurisdiction.

The opinion, delivered by Justice Murphy called the issue "primarily one of statutory interpretation" and included a statement to the effect that judicial review of the present controversy was not precluded by previous decisions barring court review of Adjustment Board decisions. "We are dealing here with something quite different from an administrative determination which Congress has made final and beyond the realm of judicial scrutiny," the opinion said. "We are dealing with a jurisdictional frustration on an administrative level, making impossible the issuance of administrative orders which Congress explicitly has opened to review by the courts. Until that basic jurisdictional controversy is settled, the procedure contemplated by section 3 of the Railway Labor Act remains a dead letter so far as yardmasters are concerned and the statutory rights of such persons become atrophied."

Justice Frankfurter filed a brief dissenting opinion in which he said that the controversy should be left "to the mediatory resources of the Railway Labor Act."

Truman Would Extend M. C.'s Ship-Operating Authority

President Truman has asked Congress to postpone from March 1 to July 1 the deadline for withdrawal of the government from business of operating merchant ships. The government operations include the coastwise and intercoastal services conducted by the Maritime Commission pursuant to an Interstate Commerce Commission authorization which is also scheduled to expire March 1.

The President's request was embodied in identical letters sent to Senator Vandenberg, president pro tempore of the Senate, and Speaker Martin of the House of Representatives. He said, among other things, that the national economy would be seriously prejudiced unless present authorizations to use funds for the ship operations are extended.

11 Democrats on House Interstate Commerce Committee

Organization of the House committee on interstate and foreign commerce was completed on January 16 when the House adopted a resolution approving assignments to the 11 minority memberships, as recommended by its Democratic leaders. The 16 Republican members, headed by Chairman Charles A. Wolverton of New Jersey, were listed in the *Railway Age* of January 18, page 208.

Representative Clarence F. Lea, who was chairman of the committee during the period of Democratic control of the House, heads the list of Democratic members in his new role of ranking minority member. Others in the minority group are: Representatives Robert Crosser of Ohio, Alfred

L. Bulwinkle of North Carolina, Virgil Chapman of Kentucky, Lindley Beckworth of Texas, J. Percy Priest of Tennessee, Oren Harris of Arkansas, George G. Sadowski of Michigan, Richard F. Harless of Arizona, Dwight L. Rogers of Florida, and Benjamin J. Rabin of New York.

Chairman Wolverton announced to the House January 20 that the committee had adopted procedures whereby any member of the House who introduces legislation referred to the committee will have an opportunity to present his views with respect to such legislation to the full committee. To accomplish this purpose, Mr. Wolverton explained, one day each week will be set aside for members introducing legislation the preceding week to be heard by the committee.

Representation of Employees

The Railroad Yardmasters of America has replaced the Brotherhood of Railroad Trainmen as the representative of yardmasters employed by the Kansas City Southern; the Brotherhood of Locomotive Firemen & Enginemen has supplanted the Brotherhood of Locomotive Engineers as the representative of locomotive engineers employed by the Kansas City Terminal; and District 50, United Mine Workers of America, has succeeded the Brotherhood of Maintenance of Way Employees as the representative of maintenance of way employees of the Berlin Mills, according to the results of recent elections which have been certified by the National Mediation Board.

As the result of other elections involving employees who formerly were without representation, patrolmen, including assistant special agents, sergeants and shop watchmen, employed by the Northern Pacific are now represented by the American Brotherhood of Railway Police, and yardmasters employed by the Atlantic Coast Line are now represented by the R. Y. of A.

Meanwhile, the United Mine Workers of America, retains its right to represent tower and telegraph employees of the Union. It won the election which the board ordered as a result of its recent finding that three operators at an electric-pneumatic interlocking plant formerly (included under the B. of R. T. contract covering yardmen) should be transferred to the telegraphers-and-towermen class. (See *Railway Age*, December 21, 1946, page 1060.)

The Pullman Car Employees Association of the Repair Shops retained its right to represent machinists, blacksmiths, sheet-metal workers, powerhouse employees and shop laborers, and the Brotherhood of Sleeping Car Porters, American Federation of Labor, retained its right to represent carmen, including coach cleaners, as the result of recent elections involving Pullman Company employees which have been certified by the board.

At the same time, the N.M.B. certified the International Brotherhood of Electrical Workers, functioning through the Railway Employees' Department, A. F. of L., to represent the Pullman Company's electrical employees, including their helpers and apprentices, and the B. of S.C.P. to represent non-clerical storeroom employees.

As noted in *Railway Age*, October 12,

1946, page 616, the N.M.B. decided that Pullman's yard and shop forces should be combined for the purposes of an election and also grouped for voting purposes into crafts or classes, a position advocated by the A.F. of L. At the time of the election, yard employees were represented by the Independent Pullman Workers Federation and shop employees by the Pullman Car Employees Association of the Repair Shops.

As the result of other elections, the Brotherhood of Railroad Trainmen, by virtue of a 148 to 119 victory over the Order of Railway Conductors of America, has replaced the latter as representative of road conductors employed by the Delaware, Lackawanna & Western, and the I. B. of E. W. has supplanted the Telegraph & Telephone Maintenance & Construction Employees Organization as the representative of linemen and groundmen employed by the Minneapolis, St. Paul & Sault Ste. Marie. In another election, the Brotherhood of Locomotive Engineers defeated the Brotherhood of Locomotive Firemen & Enginemen, 398 to 189, thereby retaining its right to represent locomotive engineers employed by the Lehigh Valley.

Southern Fined \$4,000 Under the Elkins Act

Failure of the Southern to "strictly observe" Rule 7 of the Consolidated Freight Classification by delivering certain shipments without first securing "order" bills of lading and failure to collect freight charges on certain shipments within the maximum period of 96 hours permitted by Interstate Commerce Commission regulations has resulted in fines totalling \$4,000 against the carrier, it has been announced by Secretary W. P. Bartel of the commission. The fines were levied in the federal court for the Eastern District of Tennessee, Knoxville, Tenn., on January 15.

The informations specifically charged the Southern with violating Section 1 of the Elkins Act and sections 1 and 3(2) of the Interstate Commerce Act.

Court Can Adjudicate N. J. Tax Claim Against C. N. J.

The United States Supreme Court at its January 20 session ruled that New Jersey's tax claims against the Central of New Jersey are, like all other claims against that bankrupt property, subject to adjudication by the federal district court at Newark, N. J., which has jurisdiction in the road's reorganization proceeding under section 77 of the Bankruptcy Act. At the same time the Supreme Court made plain the fact that it was not dealing with the long-standing controversy over New Jersey's tax assessments against railroads nor modifying its decision in *Arkansas Corporation Commission v. Thompson*, 313 U. S. 132, which held that a reorganization court "lacked power under section 77 to redetermine for state tax purposes the property value of a railroad where that value had already been determined in state proceedings which afforded ample protection to the railroad's rights."

Thus the court's unanimous opinion delivered by Justice Douglas confined itself to the state's contention that entertainment

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by the reorganization court of the petition filed by the road's trustee for adjudication of the tax claim amounting to about \$20,000,000 "would constitute a prohibited suit against the state, both as respects the determination of the amount of the claim and its priority or lien." The court rejected that contention, overruling the Circuit Court of Appeals, and remanded the case to the reorganization court for further proceedings.

In doing so, it emphasized the broad language of section 77's provisions relating to claims, adding that it found "not the slightest suggestion that Congress left out the large class of tax claims which recurring appears in reorganizations and often assumes, as here, large proportions." Later on the court pointed out, by way of examples, that, without crossing the "forbidden line" marked by the *Arkansas Corporation Commission* case, the reorganization court can pass upon such matters as the validity and priority of the tax claim, whether the amount of the claim has been swollen by inclusion of forbidden penalties, and whether it is subordinate to administrative expenses or other claims.

U. S. Freight, Hickok Told to Speed Interstate Divorce

Refusing to approve proposed new arrangements for the distribution of Interstate Motor Freight System stock, the Interstate Commerce Commission has implied that its next move will be a resort to court proceedings unless the United States Freight Company and Hickok Oil Corporation comply with its June 12, 1944, order requiring them to divest themselves of control the motor carrier. The proposed new arrangements modified a previously-disapproved plan for depositing the U. S. Freight and Hickok holdings of Interstate with the United States Trust Company of New York as trustee.

The modification involved sale by the respondents to John P. Altwater of a sufficient number of shares of Interstate to make the Altwater holdings 51.6 per cent of the voting stock. Meanwhile, U. S. and Hickok would deposit their remaining shares with the proposed trustee. With Commissioner Miller's dissent noted, the commission had this to say of the proposal:

"The petition requests that we find that effectuation of the proposed trust arrangement would represent substantial compliance with and satisfaction of our order of June 12, 1944. That order requires not only that respondents divest themselves of their interest in Interstate's capital stock, but also that they cease and desist from further violation of sections 5 (4) and 411 (a) (2) of the act. Even if respondents should dispose of all their interest in the considered stock, it would not necessarily follow that they had ceased and desisted from further violation of the provisions mentioned. Ownership or possession of a carrier's stock is only one of many means by which control of it may be exercised in violation of the statute.

"The order of June 12, 1944, is clear and unambiguous, and the respondents are in the best position to determine whether or not, as a matter of fact, compliance

has been made therewith. . . . If we are of the opinion, after such informal investigation as we may deem desirable, that steps taken by respondents do not in fact comply with the order, the ultimate determination of that question is properly for the court in which proceedings may be brought to enforce the order."

The divestment order accompanied the commission's report in No. MC-F-2181 and relating proceedings, which was noted in the *Railway Age* of June 24, 1944, page 1221. U. S. Freight was described in the report as a holding company which controlled Universal Carloading & Distributing Co. and other freight forwarders and held 49 per cent of the stock of seven motor carriers. The report also noted that 49.56 per cent of the capital stock of U. S. Freight was held by Balthasar H. Meyer, a former member of the commission, as trustee for the New York Central. Hickok was found without stock ownership in any common carrier other than Interstate; but the commission nevertheless held that there was a community of interest between individuals dominating the management of Hickok and of such carriers sufficient to make it reasonable to believe that joint control was exercised.

Equipment and Supplies

C.P.A. Aims to Double Output of Freight Cars

Agency says production can reach 9,000 units per month by July

A 1947 freight-car building program, designed to double the current output of approximately 3,500 cars monthly, was announced by the Civilian Production Administration branch of the Office of Temporary Controls January 17, following a meeting with its recently-organized Freight Car Builders Industry Advisory Committee.

According to the committee, the production of freight cars must be increased "approximately 100 per cent" over the present output in order to "sustain the present high railroad freight traffic and to allow for replacement of outworn equipment." Noting that the freight car shortage was estimated as high as 30,000 cars daily at the end of 1946, the committee added that production may reach 4,000 cars per month in April and "could rise to 9,000 cars monthly in July if additional materials were made available."

To Tell Industry How—At the same time, however, it was pointed out that, because C.P.A.'s priority powers expire March 31, the accelerated production program will be "built around a plan of voluntary cooperation between the car industry and the suppliers of freight car components." The C.P.A. said that it would pro-

duce a program from which the two groups can operate.

The C.P.A. said that it has exercised its priority powers to help the car building industry obtain surplus materials by amending Direction 3 to Priorities Regulation 13. The amendment permits car builders and railroads to apply to the C.P.A. for directives to obtain surplus materials from the War Assets Administration. The C.P.A. added that another directive, relating to the purchase of surplus stocks for building new cars and for making freight car repairs, may be issued when it has been definitely ascertained that such surplus stocks are available.

The advisory committee also approved the formation of a "task group" to work with the C.P.A. on the procurement of materials for freight cars and to advise the C.P.A. on production problems. A similar group, to work on steel supplies for car builders, was named by the C.P.A.'s Steel Products Industry Advisory Committee on January 10. Membership of the former group includes representatives of the American Car and Foundry Company, the Pullman-Standard Car Manufacturing Company, the Pressed Steel Car Company, the General American Transportation Company, the Greenville Steel Car Company, the Chicago, Burlington & Quincy and the Chicago, Milwaukee, St. Paul & Pacific.

According to the committee, steel supplies are the "basic problem" for car building and "some assistance" might be required to obtain sufficient plywood and other lumber for box car production. Although no formal plans were established at the meeting for obtaining lumber, a representative of the C.P.A.'s Forest Products Division said that the agency would try to expedite all lumber required as long as the C.P.A. had the power to do so.

Committee Members—The committee also agreed that in order to "formalize the program," each car builder should submit bills of materials to the C.P.A. on all components needed for freight car production in the March-June period.

Membership of the car builders advisory committee includes the following:

W. W. Kelly, general purchasing agent, Atchison, Topeka & Santa Fe; R. L. Gillispie, Bethlehem Steel Company; F. A. Livingston, Ralston Steel Car Company; R. D. Long, director, purchases and stores, C. B. & Q.; A. C. Mann, vice-president, purchases and stores, Illinois Central; Ernest Murphy, Pressed Steel Car Company; Ferdinand Schmitz, Pacific Car & Foundry Co.; R. G. Setzekorn, American Refrigerator Transit Company; G. A. Steuber, Despatch Shops; A. Van Hassel, Magor Car Corporation; R. A. Williams, American Car and Foundry Company; H. Altschul, General American Transportation Corporation; W. M. Barker, Pullman-Standard Car Manufacturing Company; K. L. Brenner, purchasing agent, Wabash; Wesley A. Clem, purchasing agent, Reading; A. N. Crenshaw, purchasing agent, Great Northern; R. D. Cummings, purchasing agent, Delaware & Hudson; D. C. Curtis, chief purchasing officer, Chicago, Milwaukee, St. Paul & Pacific; D. R. Elmore, Fruit Growers Express Company; J. S. Fair, Jr., purchasing agent, Pennsylvania; K. C. Gardner, Greenville Steel Car Company; and F. C. Holton, purchasing agent, Virginian.

LOCOMOTIVES

The PENNSYLVANIA has ordered 25 Diesel-electric locomotives, of which 19 will be 6,000-hp. passenger engines and 6 will be 7,500-hp. freight engines. The

Electro-Motive Division of the General Motors Corporation will build the freight locomotives and 5 passenger locomotives, the Baldwin Locomotive Works will build 9 passenger engines, and the American Locomotive Company will build 5 passenger engines. Deliveries of the locomotives, which will cost about \$15,000,000, are scheduled to start late this year.

The RAILWAY BOARD OF INDIA has ordered from the Baldwin Locomotive Works 16 locomotives of the 4-6-2 type for passenger and fast freight service. The tractive force of each engine will be 30,600 lb. Delivery of the locomotives, which will cost an estimated \$1,500,000, is scheduled for next August and September. Last week's *Railway Age*, page 208, reported that the Railway Board had been authorized to purchase 300 passenger locomotives.

FREIGHT CARS

The BALTIMORE & OHIO is inquiring for 1,000 50-ton twin hopper cars.

The WHEELING & LAKE ERIE is inquiring for 1,000 70-ton steel triple hopper cars.

The CHESAPEAKE & OHIO and the NEW YORK, CHICAGO & ST. LOUIS have ordered 1,600 50-ton lightweight steel box cars from the Pullman-Standard Car Manufacturing Company, of which 1,000 are for the C. & O. This is part of the equipment for which the inquiry was reported in the *Railway Age* of January 4, page 121.

PASSENGER CARS

Rock Island to Buy Two Suburban Trains

Federal Judge Michael Igoe, in Chicago, on January 17 authorized the Chicago, Rock Island & Pacific to purchase four de luxe, three-car, air-conditioned, suburban units and two 1,500-hp. Diesel-electric passenger locomotives for use in suburban service between Chicago and Joliet, Ill. In approving Rock Island trustee Aaron Colnon's petition, Judge Igoe stipulated that the road take competitive bids for the purchase of this equipment.

IRON AND STEEL

The FLORIDA EAST COAST recently ordered 12,500 net tons of rails from the Tennessee Coal, Iron & Railroad Co. and 4,000 net tons from the Bethlehem Steel Company.

SIGNALING

The CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS (part of the New York Central System) has ordered materials from the General Railway Signal Company for an automatic block signal project between Columbus, Ohio, and Springfield, 45 miles. The new installations will include two control machines—one at Miami crossing and one at Carney, Ohio. The Miami crossing machine will have 12 track-indication lights and 10 levers for the coded control of three switch machines, eight electric switch locks,

and 32 signals on 13 miles of single track between Miami crossing and Lilly Chapel. The Carney machine will have 10 track-indication lights and four levers for the coded control of two switch machines, three electric switch locks, and 15 signals on 6 miles of single track between Carney and Brooks. Equipment ordered includes Types-D and G high signals, Type-F dwarf signals, Types-B and K relays, Model-5C electric switch machines, and Model-9A electric switch locks.

Supply Trade

Clyde C. Elmes has been appointed service manager of the Budd Company's railway division. Mr. Elmes, with Budd since 1937, is a graduate of Purdue University where he specialized in railway mechanical engineering. He has served in the mechanical departments of several railroads and for twelve years was general superintendent of locomotive construction



Clyde C. Elmes

for the Baldwin Locomotive Works. He was project manager and assistant to the director of research of the Association of American Railroads' division of engineering research.

Anthony Pinto has been appointed chief engineer of the Otis-Elevator Company.

Park Sanderson has been appointed manager of the Boston, Mass., plant of Joseph T. Ryerson & Son to succeed Herbert C. Wills, who is retiring.

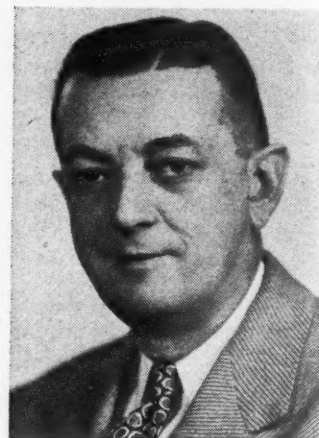
Clarence R. Abitz has been appointed general manager of the McKees Rocks works of the American-Fort Pitt Spring division of the H. K. Porter Company.

The Ulster Iron Works has announced the appointment of Frank W. Hamilton, Jr. as assistant to the president, with headquarters at Dover, N. J.

The Prime Manufacturing Company, Milwaukee, Wis., has announced the acquisition of two new railroad locomotive products, namely, a locomotive soot blower and pneumatic bell ringer, both formerly

manufactured by the Superior Railway Products Corporation, Pittsburgh, Pa.

Anthony C. Fecht has been appointed manager of railway sales for the Lewis



Anthony C. Fecht

Bolt & Nut Co. Mr. Fecht has been associated with the company since 1928.

George S. Blackmore has been appointed western district manager of the Western Railroad Supply Company, with headquarters at Chicago.

Ray Cole has been placed in charge of the Boston, Mass., office of the Electric Service Manufacturing Company to succeed J. B. Miller, who has been appointed manager of the New York office.

Harold A. Hallstein, formerly vice-president, has been elected to the newly-created post of executive vice-president of the Austin Company. He will continue as assistant general manager, assistant treasurer and assistant secretary.

E. M. Schultheis, formerly manager of sales for the automotive division, has been appointed manager of sales for the Trutractor division of the Clark Equipment Company. Leo A. Bixby, formerly manager of engineering for the automotive division, has been transferred in the same



E. M. Schultheis

capacity to the Trutractor division. Also announced were the retirements of Edwin B. Ross, vice-president in charge of sales

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for Clark Equipment, and **Ezra W. Clark**, vice-president and general manager of the Tractor division.

Joseph G. Cooper has been appointed assistant to the vice-president—traffic of the **Bethlehem Steel Company**, with headquarters at Bethlehem, Pa. He formerly was assistant to the general traffic manager.

G. Lawton Johnson has been appointed assistant general manager of sales of the **National Tube Company**, a subsidiary of the United States Steel Corporation. He will handle the sale of products manufactured at the Christy Park works, McKeesport, Pa.

James W. Birkenstock, former general sales manager of the **International Business Machines Corporation**, has been appointed manager of the future demands department.

Herbert B. Woodman, former vice-president and secretary of the **Interchemical Corporation**, has been elected president to succeed **Ernest W. Pittman**, who has been elected to the newly-created office of chairman of the executive committee.

Thomas Robins, Jr., president of **Hewitt Robins Inc.**, Buffalo, N. Y., and **Lester H. Buttenheim**, president of the **McKiernan-Terry Corporation**, Harrison, N. J., have announced an agreement under which McKiernan-Terry has acquired the good will, drawings, jigs, fixtures, and spare parts of the Mead-Morrison division of Robins Conveyor, Inc. Under the agreement, the two companies will cooperate in carrying out important harbor facility projects involving bulk materials handling equipment problems. Robins will continue its line of conveyors of all types, and McKiernan-Terry will handle the principal products of Robins' former Mead-Morrison division, consisting of loading towers, ore bridges, man trolleys, grab buckets, car dumpers, and car and barge haul machines.

OBITUARY

Charles B. Carr, formerly manager of the Cleveland, Ohio, branch sales office of the Gisholt Machine Company, died on January 8. He was 83 years old.

John W. Bray, a director of the Bullard Company, Bridgeport, Conn., died on January 4, after a long illness. He was 79 years old. Mr. Bray joined Bullard as an apprentice in 1884. He was elected a director in 1930 and appointed vice-president in charge of sales in 1932.

Robert Jay Burrows, a vice-president and director of the Clark Equipment Company, died suddenly of a heart attack on January 12, at Hollywood, Cal. Mr. Burrows had been associated with the firm for more than 30 years, and was prominent in the automotive, industrial tractor and modern street railway equipment industries. He was born on November 28, 1882, at Youngstown, Ohio, and following his graduation as a mechanical engineer from Clarkson College of Technology, at Pots-

dam, N. Y., he joined the Weston-Mott Axle Company at Flint, Mich. In 1913 he became chief engineer and general manager of the Lee & Porter Co., manufacturers of axles, at Buchanan, Mich. Following a short association with the American Gear Company, at Jackson, Mich., Mr. Burrows in 1915 joined the Clark Equipment Company, and shortly thereafter became a vice-president and director. He was the inventor of a new type motor truck axle, which resulted in the firm's formation of its axle division. Mr. Burrows was also responsible for creation of the tractor and railway divisions of the company, through his work in these two fields.

Construction

ATLANTIC COAST LINE.—This road has authorized the rearrangement of tracks at the Pelham, Ga., terminal (probable cost, \$119,535) and the relocation of the main track and station facilities at Gainesville, Fla. (probable cost \$351,276).

BALTIMORE & OHIO.—This road has awarded the following contracts, the estimated costs of which are shown in parentheses: To Louis Scully & Sons, Chicago, for the construction of drainage facilities in the Barr yard, at Chicago (\$34,000); to the Ellington Miller Company, Chicago, for the construction of communication towers in the Barr yard (\$39,000); to W. M. Brode Company, Newcomerstown, Ohio, for the reconstruction of bridge 1908 at Glenwood, W. Va., and bridge 2207 at Ceredo, W. Va. (\$97,000); to Vogt & Conant, Cleveland, Ohio, for the erection of a superstructure on bridge 730 at Burnsville, W. Va. (\$27,000); to the Baker & Hickey Co., Columbus, Ohio, for the reconstruction of bridges 48, 62, 81 and 90 at, respectively, Quaker City, Mineral Siding, New Concord and Bridgeville, all in Ohio (\$77,000); to the Minton Construction Company, Cleveland, for the construction of buildings at the lake coaling facilities, Lorain, Ohio (\$228,000); to the Helvenston Construction Company, Pittsburgh, Pa., for the construction of an extension to the Scotland street freight house in Pittsburgh (\$44,000) and to the Ross & White Co., Chicago, for the construction of coal and sand handling facilities at Baltimore (Riverside), Md. (\$100,000).

READING.—This road has awarded a contract to Metalweld, Inc., Philadelphia, Pa., for strengthening the steel superstructure of bridge 3/66 at West Reading, Pa. The estimated cost of the project is \$25,000.

SEABOARD AIR LINE.—This road has authorized work at the wheel and axle shop at Portsmouth, Va., at an approximate cost of \$25,000.

NEW YORK, NEW HAVEN & HARTFORD.—This road has authorized the construction of mooring facilities at Stoney Point along the Harlem river in New York (probable cost, \$75,000), the reconstruction of bridge 65.40 at Cornwall Bridge, Conn. (probable

cost, \$50,000), and the reconstruction of a retaining wall at New Haven, Conn. (probable cost, \$30,000).

Financial

BALTIMORE & OHIO.—Equipment Trust Certificates.—Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for \$3,310,000 of Series S equipment trust certificates, the proceeds of which will be applied toward the purchase of 1,000 50-ton steel box cars, at an estimated unit cost of \$4,149, from the Pressed Steel Car Company. The certificates will mature in 10 equal annual installments, starting January 1, 1948. The report also approves a selling price of 99.401 for a 2 per cent interest rate, the bid of Halsey, Stuart & Co., on which basis the average annual cost will be approximately 2.12 per cent.

CANADIAN PACIFIC.—New Director.—G. A. Walker, general counsel for this road, has been elected a director to succeed the late Morris W. Wilson. Mr. Walker also has been elected vice-president of the C. P. R., effective next February 1.

CHESAPEAKE & OHIO.—Authorizes Sale of W. & L. E. Common Stock.—The Chesapeake & Ohio directors have authorized the sale of the road's holding of 78,145 shares of Wheeling & Lake Erie common stock to the New York, Chicago & St. Louis at the price stipulated by the Interstate Commerce Commission as a condition to its approval of the merger of the Chesapeake & Ohio and the Pere Marquette, Robert R. Young, chairman of the C. & O., has announced. The price recommended by the I.C.C. was substantially below the price agreed upon by the two parties. At the time of the recommendation, Mr. Young said that, in his opinion, the I.C.C.'s proposal was unfair inasmuch as the price recommended by the commission was the same as the price paid for it by the C. & O. years ago. (See the *Railway Age* for December 28, 1946, page 1094.)

In making the announcement, Mr. Young said: "My views have not changed as to the unfairness of the Interstate Commerce Commission's conditions, but we cannot go on holding up indefinitely these steps looking toward the creation of important new Eastern systems, when the economies and benefits to the public are so far reaching."

CHICAGO, BURLINGTON & QUINCY.—Acquisition.—This road has filed a supplemental application in the Finance Docket No. 15200 proceeding, asking the Interstate Commerce Commission to approve its proposed acquisition of an additional 260 shares of Missouri & Illinois Bridge & Belt stock. The transaction, involving the purchase of Wabash and Baltimore & Ohio holdings of 130 shares each, would bring the Burlington's holdings to 910 shares or seven-elevenths of the total Bridge & Belt shares outstanding. This, as the application points out, would change the nature of the applicant's interest from joint control to sole control. The proposed purchase

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price of the stock is \$266.67 per share, the same as that involved in the transaction approved in the proceeding's prior report of March 15, 1946.

DELAWARE, LACKAWANNA & WESTERN.—Control of Leased Line.—Division 4 of the Interstate Commerce Commission has authorized this road to acquire, through stock ownership, control of the Passaic & Delaware Extension from Bernardsville, N. J., to Gladstone, which the applicant has operated since May 1, 1890. The transaction is part of the road's program to acquire the properties of leased lines essential to its system. In approving this transaction, in which the applicant will purchase 513 shares of the capital stock of the P. & D. E. at \$75 per share, the commission imposed the usual employee-protection conditions. (See *Railway Age* of November 2, 1946, page 744.)

DULUTH, SOUTH SHORE & ATLANTIC.—Reorganization Plan.—Examiner Harvey H. Wilkinson has recommended in a proposed report that the Interstate Commerce Commission approve for this road a plan of reorganization under which the capitalization would be reduced from \$46,650,755 to \$15,500,000, the former figure being exclusive of \$29,99,157 of accrued and unpaid interest on funded debt. The proposed new capitalization would include \$5,000,000 of first-mortgage 4 per cent 50-year bonds and common stock of \$10,500,000, consisting of 210,000 no-par shares with a stated value of \$50 per share; and present annual fixed charges of \$859,700 would be replaced by contingent charges of \$200,000.

The latter would be the interest on the first mortgage bonds which, the report's summary explained, "would accumulate only under the following conditions and to the following extent, i.e., if under the provisions of the plan defining available net income, there should be deducted in arriving at available net income for the preceding year an amount for the extinguishment of any deficit or deficits in available net income for any prior year or years, and if such deduction should result in the payment of less than all of the interest which but for such deduction would have been payable as interest for such preceding year, the amount of such deficiency in interest would accumulate and become payable subsequently."

All of the new securities would be distributed to present bondholders, the proposed report having found without value and thus having made no provision for the interests or equities of (1) holders of the debtor's preferred and common stocks and stocks of its subsidiary, the Mineral Range; (2) holders of claims against the debtor other than those of the bondholders; and (3) holders of claims against the Mineral Range other than the Hancock & Calumet's 5 per cent bonds dated January 1, 1891, assumed by the Mineral Range, the latter's 5 per cent and 4 per cent bonds dated December 1, 1890, and its 4 per cent bonds dated January 1, 1901.

"Public" holders of the debtor's 5 per cent bonds would receive, for each \$1,000 of such holdings, \$125.45 in cash and \$500 in new first-mortgage bonds. The Canadian Pacific, as holder of 801 5s and all other

bonds of the debtor, and all except eight of the subsidiary debtor's bonds, would receive, for each \$1,000 of such holding, \$43.83 in cash, \$179.79 in new first-mortgage bonds and \$555.48 in common stock. The total distribution to the C.P.R. would be \$828,597 in cash, \$3,398,500 in bonds, and all of the \$10,500,000 common-stock issue. Meanwhile, holders of the eight Mineral Range bonds not owned by the C.P.R. would receive, for each \$1,000 of such holdings, \$9 in cash and \$250 in the new bonds.

The proposed report recommends that the effective date of the reorganization plan be January 1, 1945. The road has been in bankruptcy for 10 years, its petition for reorganization under section 77 of the Bankruptcy Act, which initiated the present proceeding, having been approved early in 1937.

GREAT NORTHERN.—Bond Reduction.—This road, it is reported, purchased in the open market in December, 1946, \$2,117,000 of its outstanding 5½ per cent general mortgage bonds of 1952. The purchase was paid for with treasury cash. On December 31, \$14,599,400 of the bonds remained outstanding.

ILLINOIS NORTHERN. — Promissory Notes.—This road has applied to the Interstate Commerce Commission for authority to issue two 4-year promissory notes in the total amount of \$165,000 to its parent corporation, the International Harvester Company. The notes, bearing interest at 4 per cent, would be in amounts of \$40,000 and \$125,000, the first evidencing an emergency advance to settle a personal injury suit and the second covering advances to pay overdue rental for a line leased from the Atchison, Topeka & Santa Fe and to meet current expenses.

NEW YORK, CHICAGO & ST. LOUIS.—Equipment Trust Certificates.—This road has applied to the Interstate Commerce Commission for authority to assume liability for \$1,000,000 of 10-year equipment trust certificates to be issued in connection with the purchase of 14 1,000-hp. Diesel-electric switching locomotives at a total cost of \$1,253,000. The certificates would be sold on the basis of competitive bids with the interest rate specified in such bids.

NEW YORK, NEW HAVEN & HARTFORD.—Bonds of Norwich & Worcester.—This road's lessor, the Norwich & Worcester, has applied to the Interstate Commerce Commission for authority to issue \$1,800,000 of 20-year, first mortgage gold bonds, series B, the proceeds to be used to meet the March 1 maturity of a like amount of series A 4½ per cent bonds. The new bonds would be sold on the basis of competitive bids with the interest rate specified in such bids; they would be dated March 1 and mature March 1, 1967, being callable meanwhile at prices ranging from 104 to and including March 1, 1951, to par after March 1, 1963.

SEABOARD AIR LINE.—Equipment Trust Certificates.—This road has applied to the Interstate Commerce Commission for authority to assume liability for \$3,000,000 of Series A equipment trust certificates, the proceeds of which will be applied

toward the purchase of the following equipment: 43,000-hp. Diesel-electric road locomotives, at an estimated unit cost of \$249,375, from the Baldwin Locomotive Works; 7 1,000-hp. Diesel-electric switching locomotives, at an estimated unit cost of \$79,000, also from Baldwin; 7 1,000-hp. Diesel-electric switching locomotives, also at an estimated unit cost of \$79,000, from the American Locomotive Company; 200 70-ton, all-steel covered phosphate cars, at an estimated unit cost of \$5,006, from the Pullman-Standard Car Manufacturing Company; 150 70-ton, all-steel covered cement cars, at an estimated unit cost of \$4,550, from the Bethlehem Steel Company; and 50 all-steel, double-door box cars, at an estimated unit cost of \$5,800, from Pullman-Standard. The certificates would be dated February 1 and sold on the basis of competitive bids.

SARATOGA & SCHENECTADY.—Increased Dividend.—This road declared a dividend of \$3 a share on the common stock which was paid on January 15 to stockholders of record on January 2. The previous payment was \$2 a share on July 15, 1946.

TOLEDO, PEORIA & WESTERN.—Note.—Division 4 of the Interstate Commerce Commission has authorized this road to issue and renew at par a 2-per cent promissory note for \$300,000 to evidence a loan of a like amount from the New York Trust Company. Proceeds of the loan will be used for working capital. (See *Railway Age* of January 4, page 122.)

Average Prices Stocks and Bonds

	Jan. 21	Last week	Last year
Average price of 20 representative railway stocks...	49.03	48.91	64.84
Average price of 20 representative railway bonds...	91.35	91.06	102.39

Dividends Declared

Atlantic Coast Line.—\$1.00, payable March 12 to holders of record February 13.
East Pennsylvania.—\$1.50, semi-annually, payable January 21 to holders of record December 31.
Louisville & Nashville.—88¢, quarterly, payable March 12 to holders of record January 31.
Michigan Central.—\$25.00, semi-annually, payable January 31 to holders of record January 17.
Mine Hill & Schuylkill Haven.—\$1.00, semi-annually, payable February 1 to holders of record January 15.

* * *



Canadian National Photo

Cafe car on the Canadian National

Abandonments

NEVADA COPPER BELT.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon its entire line, extending approximately 28 miles from Wabuska, Nev., to Hudson.

PITTSBURGH & LAKE ERIE.—Division 4 of the Interstate Commerce Commission has authorized this road and its lessor, the Pittsburgh, McKeesport & Youghiogheny, to abandon, including operation thereof by the former, a 5.63-mile branch from Fayette City, Pa., to Perryopolis Junction.

OUACHITA & NORTH WESTERN.—This road has applied to the Interstate Commerce Commission for authority to abandon its entire 10.7-mile line from Bethel, La., to Standard.

SOUTHERN PACIFIC.—This road and its lessor, the Arizona Eastern, have filed with the Interstate Commerce Commission a joint application seeking authority, respectively, to abandon operation of and abandon a 1.2-mile branch from Inspiration Junction, Ariz., to Live Oak.

SUNCOOK VALLEY.—This road has applied to the Interstate Commerce Commission for authority to abandon that portion of its line between Pittsfield, N. H., and Center Barnstead, approximately 4.57 miles.

TONOPAH & GOLDFIELD.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon its entire line, extending approximately 88.28 miles from Goldfield, Nev., to Tonopah Junction, and to abandon operation under trackage rights over the Central Pacific from Mina, Nev., to Tonopah Junction, approximately 9 miles.

Railway Officers

EXECUTIVE

Lewis A. Putnam has been elected executive vice-president of the Barre & Chelsea and the St. Johnsbury & Lake Champlain at Montpelier, Vt.

Otto J. Smidl, whose promotion to assistant to vice-president—operations (contracts), of the Chicago, Burlington & Quincy, with headquarters at Chicago, was reported in the *Railway Age* of January 11, was born in 1886, at Chicago, and received his higher education at the University of Chicago. He began his railroad career in 1900 with the Burlington, and from 1905 to 1921, he held various clerical positions in the general manager's office at Chicago. Mr. Smidl was advanced in 1921 to assistant chief clerk, general manager's office, and in 1928 to contract clerk, vice-president's office. He was advanced to supervisor of contracts in 1941, the posi-

tion he held at the time of his new appointment.

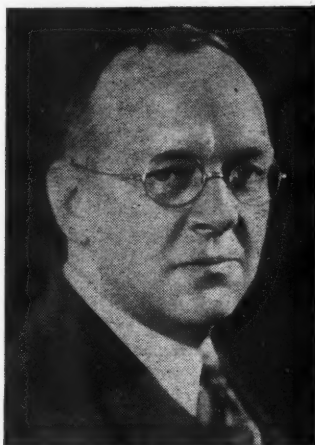
J. Howard Miller, Jr., whose promotion to assistant to vice-president in charge of freight traffic of the Reading, at Philadelphia, Pa., was reported in the *Railway Age* of January 18, was born on February 22, 1906, at Philadelphia. Mr. Miller at-



J. Howard Miller, Jr.

tended Temple University and the University of Pennsylvania and entered railroad service on August 1, 1924, with the Reading as stenographer—freight rates. He was appointed assistant rate clerk in 1925; expediting clerk, Philadelphia division freight in 1926; freight traffic representative in 1927; chief clerk to assistant freight traffic manager in 1939, and chief clerk to general freight traffic manager in 1942, all in the freight traffic department. Mr. Miller served as chief clerk to vice-president in charge of freight traffic from 1945, until his recent promotion to assistant to vice-president.

William C. Bower, whose retirement as vice-president in charge of purchases and stores of the New York Central system at New York was reported in the *Railway Age* of January 11, was born

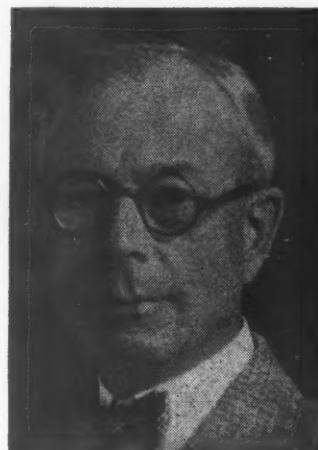


William C. Bower

at Clarkston, Mich., on September 20, 1878. Mr. Bower entered railroad service in 1897 as stenographer for the Grand Trunk at Detroit, Mich. From 1901 to 1903 he served as assistant clerk, United States Senate,

Washington, D. C., becoming stenographer for the New York Central at New York in the latter year. He was appointed secretary to the vice-president of that road in 1905, becoming secretary to the president in 1908. Mr. Bower became purchasing agent in 1911 and general purchasing agent in 1920. He was appointed assistant manager of purchases and stores in 1922, being promoted to manager of purchases and stores in 1923. He held the latter position until 1930, when he was promoted to vice-president of purchases and stores of the system, which position he held until his recent retirement.

Fredolin F. Riefel, whose retirement as vice-president of the New York Central lines west of Buffalo, with headquarters at Cleveland, Ohio, was reported in the *Railway Age* of January 11, entered railroad service on January 28, 1892, as an office boy on the New York Central at Buffalo, N. Y. Mr. Riefel served successively until 1912 as telegraph operator, train dispatcher, chief dispatcher, assistant trainmaster, trainmaster and assistant superintendent. From 1912 to 1915 he was superintendent of telegraph at Cleveland, becoming superintendent of the Detroit division at Detroit, Mich., in the latter year. He was appointed



Fredolin F. Riefel

general superintendent at Chicago in 1926, holding that position until 1937, when he was appointed assistant vice-president at Chicago. From February, 1940, to November, 1945, he was assistant vice-president and general manager of the New York Central lines west of Buffalo and the Ohio Central lines, at Cleveland. Mr. Riefel was promoted to vice-president at Cleveland in November, 1945, the position he held at the time of his recent retirement.

FINANCIAL, LEGAL AND ACCOUNTING

J. P. McDonald, general statistician of the Atchison, Topeka & Santa Fe, with headquarters at Chicago, has been appointed assistant general auditor, with the same headquarters.

C. A. Knowles, assistant to vice-president (accounting) of the Chesapeake & Ohio, has been appointed assistant to the comptroller, with headquarters as before at Richmond, Va. The position of assistant

to vice-president (accounting) has been abolished.

Charles M. Davison, Jr., of the law firm of Covington, Burling, Rublee, Acheson & Shorb of Washington, D. C., has been appointed general tax attorney of the Southern system, with headquarters at Washington.

OPERATING

G. B. Henderson, whose promotion to general manager of the Chicago & Eastern Illinois, with headquarters at Chicago, was reported in the *Railway Age* of January 4, was born at Fort Atkinson, Iowa, and began his career with the C. & E. I. as a crew caller at St. Elmo, Ill., in 1903. He served as station clerk and yard clerk there until 1905, when he went to Salem, Ill., where he held positions as trainmaster's clerk and clerk in the office of superintendent. In 1910 he was advanced to chief clerk to superintendent there, remaining until 1916 when he was transferred



G. B. Henderson

to Danville, Ill. Mr. Henderson was appointed trainmaster there in 1920, which position he held until 1930, when he was transferred to Villa Grove, Ill. When the position of trainmaster was abolished at Villa Grove in 1933 because of a business decrease, he was appointed general yardmaster there. In 1938 he became agent-yardmaster in charge of the southern Illinois coal fields on the C. & E. I. line, with headquarters at West Frankfort, Ill. Mr. Henderson was advanced to assistant general manager on January 1, 1946, the position he held at the time of his current appointment.

John Cannon has been appointed mechanical superintendent of the Pullman Company, with headquarters at Chicago, and **L. F. Munson** has been appointed assistant mechanical superintendent, with the same headquarters.

D. William Brosnan, chief engineer of maintenance of way and structures of the Southern, with headquarters at Cincinnati, Ohio, has been appointed general manager, Central lines, at Knoxville, Tenn., succeeding **Oliver B. Keister**, who will retire on February 1, after 60 years of service. Mr. Brosnan was born at Albany, Ga., on April 14, 1903, and received his civil

engineering degree from Georgia School of Technology in 1923. He served as resident engineer of the state highway department of Georgia for three years and entered the service of the Southern in March, 1926, as assistant engineer in the maintenance of



D. William Brosnan

way department at Macon, Ga. After serving in various engineering capacities at Chattanooga, Tenn.; Cincinnati; and Somerset, Ky., he was appointed trainmaster at Oakdale, Tenn., being transferred in a similar capacity to Birmingham, Ala., in February, 1938. He was promoted to superintendent at Selma, Ala., in October, 1938, and later served in the same capacity at Macon and at Birmingham. On February 1, 1946, he was appointed chief engineer of maintenance of way and structures at Cincinnati.

Mr. Keister was born at Albany, Ky., on January 29, 1877, and entered the service of the Southern at the age of ten as a messenger at Chattanooga in 1887. After learning telegraphy he subsequently served as a telegraph operator at various stations in the Knoxville territory. In October,



Oliver B. Keister

1899, he was promoted to train dispatcher at Knoxville and has served there continuously since that time except for a brief period as superintendent at Selma, Ala. Promoted to chief dispatcher in September, 1905, he subsequently served as trainmaster, superintendent, and as general superintendent. In August, 1934, he was promoted to general manager.

Iver P. Iversen, whose promotion to division superintendent of the Northern Pacific, with headquarters at Tacoma, Wash., was reported in the *Railway Age* of January 4, was born on March 31, 1879, at Clinton, Iowa, and entered railroad service with the Illinois Central in 1900 as a brakeman at Henderson, Ky. Mr. Iversen served as conductor and general yardmaster of the Southern from 1901 to 1909, and in the following year he joined the Northern Pacific as general yardmaster at Pasco, Wash. He served in that capacity also at Auburn, Wash., and was later appointed trainmaster at Seattle, Wash. In 1918 he was transferred to the Seattle Terminal division, where he was associated until 1920 with the Railroad Administration's unified terminal. He returned to the N. P. in 1920 as general yardmaster at Seattle, and in June, 1936, he was advanced to assistant division superintendent there. From June, 1941, to September, 1945, he was on loan to the Chief of Transportation, War Department, as West



Iver P. Iversen

coast transportation specialist. Following completion of this duty, Mr. Iversen returned to his position as assistant superintendent at Seattle, and remained in that capacity until his recent promotion.

F. H. Berry has been appointed assistant superintendent, Nashville terminals, Louisville & Nashville, and Nashville, Chattanooga & St. Louis, with headquarters at Nashville, Tenn.

R. H. Forbes has been appointed trainmaster of the Illinois Central, with headquarters at Mattoon, Ill., succeeding **Theodore R. Beach**, whose appointment as superintendent of the Peoria & Pekin Union, at Peoria, Ill., was reported in the *Railway Age* of January 18.

E. F. Thomson, superintendent of the Southern division of the Chicago, Indianapolis & Louisville, with headquarters at Lafayette, Ind., has been promoted to assistant to general manager, with the same headquarters. **C. C. Shoulty**, superintendent of the road's northern division, with headquarters at Lafayette, has been advanced to superintendent of the entire Monon line. The positions of superintendents, northern and southern divisions, have been abolished. **M. E. Strother**, assistant superintendent of the southern division, at Lafayette, has

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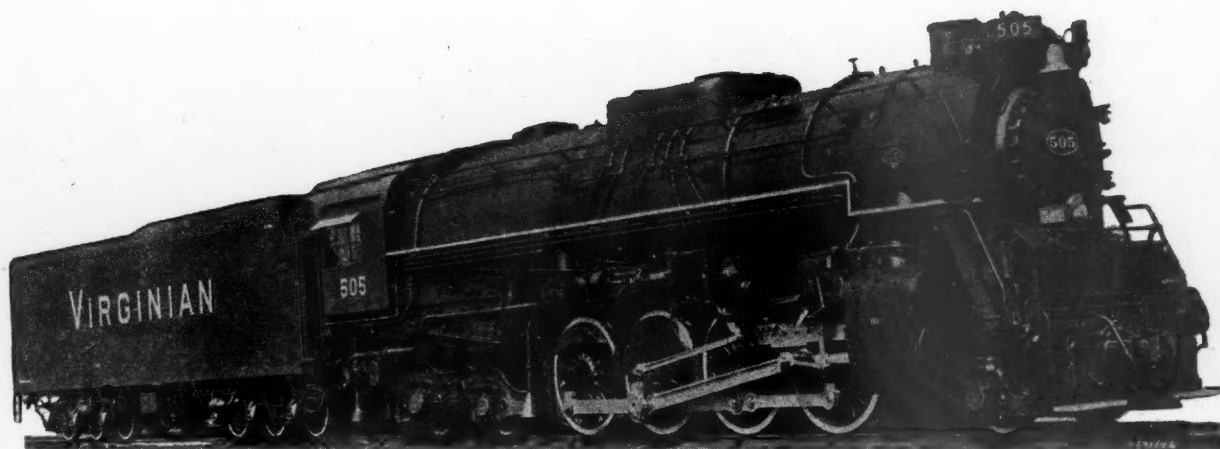
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with modern power



Today, freight train schedules are rapidly approaching the speeds of passenger schedules. Coupled with this need for speed is the problem of moving a large volume of traffic. Progressive railroads, such as the Virginian, have realized these fundamental facts and have kept abreast of conditions by augmenting their power with Lima-built modern steam locomotives, such as the Lima 2-8-4, illustrated above.

LIMA LOCOMOTIVE WORKS



INCORPORATED, LIMA, OHIO

January 25, 1947

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been transferred to Bloomington, Ind., with jurisdiction over the McDoel district.

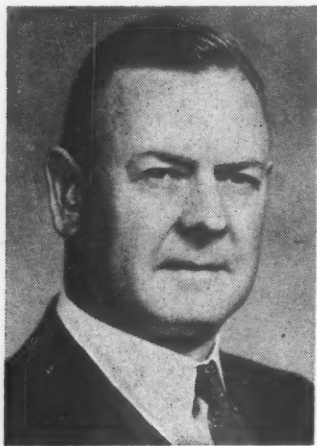
J. N. Fraine, whose promotion to superintendent of the Laurentian division of the Canadian Pacific at Montreal, Que., was reported in the *Railway Age* of January 11, was born at Medicine Hat, Alta., in 1912. Mr. Fraine was graduated in civil



J. N. Fraine

engineering from the University of Manitoba and became assistant superintendent of the Canadian Pacific in 1943, serving successively at Lethbridge, Ont., North Bay, Schreiber and Toronto.

W. E. Robinson, whose promotion to assistant general manager of the Central region of the Canadian National at Toronto, Ont., was reported in the *Railway Age* of January 11, was born at North Sydney, N. B., on June 9, 1889. Mr. Robinson entered railroad service in 1905 as station agent on the Halifax & South Western at Ingramport, N. S., becoming ticket agent and freight agent at Bridgewater, N. S., the following year, and train dispatcher there in 1908. In 1910 he became agent at Port Wade, N. S., and in



W. E. Robinson

1911, train dispatcher at Bridgewater. Mr. Robinson served as terminal operator and train dispatcher for the Canadian Pacific at Calgary, Alta. and Medicine Hat, from 1911 to 1913 and as train dispatcher at Bridgewater for the Halifax & South Western from 1913 to 1918. He then served

as assistant superintendent for the Canadian National at Bridgewater and Moncton, N. B., from 1918 to 1929, becoming superintendent at Campbellton, N. B., in the latter year. On September 1, 1932, he was transferred to Moncton and on January 1, 1937, to Halifax, N. S. He was promoted to general superintendent transportation at Moncton on September 21, 1938, becoming general superintendent at North Bay, Ont., on July 1, 1944. He was transferred to the Southern Ontario district at Toronto in March, 1946, which position he held at the time of his recent promotion.

James B. Thom, European traffic manager of the Canadian National at London, England, has been promoted to European manager, succeeding **Percy A. Clews**, whose retirement was reported in the *Railway Age* of January 18. Mr. Thom went to England as European traffic manager last summer, after serving as assistant to the vice-president in charge of traffic at Montreal, Que., since 1936.

W. F. Tully, whose appointment as general superintendent of the Quebec district of the Canadian Pacific at Montreal, Que., was reported in the *Railway Age*



W. F. Tully

January 11, was born at Keewatin, Ont. Mr. Tully served as assistant superintendent of the Smiths Falls division and as superintendent of the Farnham and Montreal terminals, after many years with the Canadian Pacific in western Canada.

T. E. Boyle, superintendent of the Indianapolis, (Ind.,) division of the Pennsylvania, has been appointed superintendent of freight transportation of the Western region, with headquarters at Chicago, succeeding **Allen J. Greenough** whose appointment as superintendent of the Maryland division at Baltimore, Md., was reported in the *Railway Age* of January 18. **W. G. Dorwart**, division engineer of the Pittsburgh division, succeeds Mr. Boyle as superintendent of the Indianapolis division.

Allen J. Greenough, whose appointment as superintendent of the Maryland division of the Pennsylvania at Baltimore, Md., was reported in the *Railway Age* of January 18, was born at San Francisco, Cal., on September 20, 1905. Mr. Green-

ough received his bachelor of science degree in civil engineering from Union College, Schenectady, N. Y., in 1928, entering railroad service that same year as assistant on the engineer corps of the Pennsylvania at New York. In 1929, he was appointed assistant supervisor track and in 1933 he was promoted to supervisor of track, which position he held successively on the Cin-



Allen J. Greenough

cinnati, Philadelphia and New York divisions. From 1939 to 1945 Mr. Greenough served as division engineer on the Columbus and Pittsburgh divisions, becoming superintendent of the Wilkes-Barre division at Sunbury, Pa., in 1945. He was appointed superintendent of freight transportation of the Western region at Chicago on April 1, 1946, which position he was holding at the time of his recent appointment as superintendent of the Maryland division.

Col. Samuel H. Pulliam, whose promotion to superintendent of the Huntington division of the Chesapeake & Ohio at Huntington, W. Va., was reported in the *Railway Age* of January 4, was born at Richmond, Va., on November 20, 1894. He entered railroad service in 1912 in the sur-



Col. Samuel H. Pulliam

vey department of the Baltimore & Ohio, serving as axman and rodman until 1913, then serving until 1916 as rodman and inspector in the construction department of that road. From 1916 to 1920, Colonel Pulliam was assistant track supervisor and

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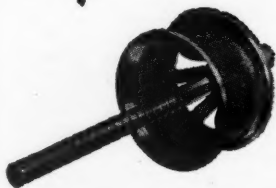
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January 25, 1947

28

assistant division engineer, successively, of the Baltimore & Ohio, then serving from 1920 to 1922 as building engineer for the Van Blarcom Company, Cleveland, Ohio, and from 1922 to 1924 as track supervisor for the B. & O. Entering the service of the Chesapeake & Ohio in February, 1924, he served as division engineer until 1928, when he became trainmaster. He held the latter position until 1943, when he became lieutenant colonel, Transportation Corps, U. S. Army. In January, 1946, Colonel Pulliam re-entered the service of the C. & O. as assistant superintendent of the Huntington division, which position he held until his recent promotion.

Guy Prentiss Gibbs, whose promotion to general superintendent of the Western general division of the Chesapeake & Ohio at Huntington, W. Va., was reported in the *Railway Age* of January 4, was born at Catlettsburg, Ky., on October 11, 1892. He entered the service of the Chesapeake & Ohio in May, 1909, at Ashland, Ky., where he spent eight years as telegrapher and agent-operator in the chief dispatcher's office. He served as agent at Elkhorn City, Ky., for two years and spent another two



Guy Prentiss Gibbs

years as yardmaster at Shelby and at Paintsville, Ky., before becoming trainmaster of the Big Sandy subdivision in 1920. In 1926 Mr. Gibbs was transferred to the Handley Coal subdivision, being promoted to assistant superintendent of the Hinton division in May, 1936. He was appointed superintendent of the Clifton Forge division in June, 1940, and assistant general superintendent at Huntington in April, 1942, holding the latter position at the time of his recent promotion to general superintendent.

Norman A. Walford, whose promotion to general superintendent of the Southern Ontario district of the Canadian National at Toronto, Ont., was reported in the *Railway Age* of January 11, was born at Walkerton, Ont., on July 31, 1891. Entering railroad service on October 9, 1908, as assistant agent for the Grand Trunk (Canadian National) at Walkerton, Mr. Walford subsequently served with those roads as agent at Hespeler, Ont., agent at Walkerton, freight claims inspector of the Stratford division, district agent of the Southern Ontario district at Toronto, dis-

trict supervisor of car service of the Ontario district at Toronto, and passenger trainmaster of the Ontario district at Toronto. On November 1, 1934, Mr. Walford was appointed assistant superintendent of the London division at London, Ont., becoming superintendent of terminals at



Norman A. Walford

Black Rock, N. Y., on January 16, 1938. He was appointed superintendent of the Stratford division of the Canadian National at Stratford, Ont., on July 1, 1939, and was transferred to the London division at London on September 15, 1941, remaining in that position until his recent promotion to general superintendent of the Southern Ontario district.

Carl H. Burgess, whose promotion to assistant general manager of the Northern Pacific, with headquarters at Seattle, Wash., was reported in the *Railway Age* of January 4, was born on February 17, 1894, at Worcester, Mass., and was graduated from Worcester Polytechnic Institute in 1916 with a degree in civil engineering. Mr. Burgess entered railroad service with the N. P. in June, 1916, holding various positions in the track and engineering departments until 1923, when he became assistant roadmaster at Livings-



Carl H. Burgess

ton, Mont. From 1925 until 1936 he served successively as roadmaster at Fargo, N. D., and Glendive, Mont., and as division roadmaster at Jamestown, N. D., and Missoula, Mont. In 1936 he was appointed trainmaster at Missoula, which position he held later,

also at Pasco, Wash., Auburn and Tacoma. He was advanced to assistant superintendent at Tacoma in 1939, and was further promoted to superintendent there in 1942. Mr. Burgess held the latter position at the time of his recent appointment.

J. T. Theby, whose promotion to superintendent of terminals of the Chicago & Eastern Illinois, with headquarters at Chicago, was reported in the *Railway Age* of December 14, 1946, has served with several roads, including the Missouri-Kansas-Texas, the Gulf, Mobile & Ohio and the Chicago, Rock Island & Pacific. Upon joining the C. & E. I., Mr. Theby held positions as yard clerk, switchman, yardmaster, general yardmaster and assistant trainmaster. He was trainmaster at Danville, Ill., at the time of his recent appointment.

Emiel Leslie Welte, whose promotion to superintendent of the Stratford division of the Canadian National at Stratford, Ont., was reported in the *Railway Age* of January 11, was born at Winnipeg, Man. He started railroading in 1906 as clerk



Emiel Leslie Welte

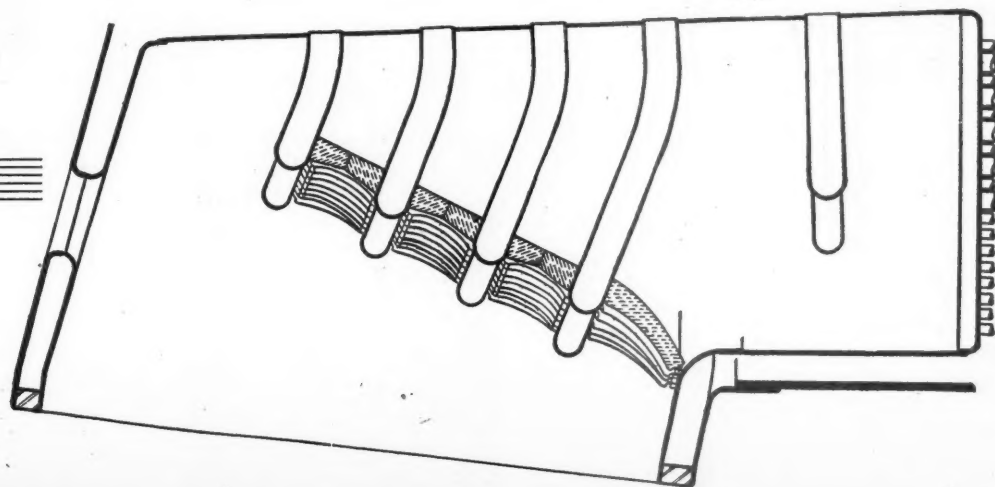
for the Canadian National at Allandale, Ont., being promoted to yardmaster in 1917. In June, 1941, he became trainmaster at Capreol, Ont., and four months later he was appointed assistant superintendent at Hornepayne, Ont. In December, 1942, Mr. Welte was transferred to Lindsay, Ont., in a similar capacity and in July, 1944, he became assistant superintendent of the Belleville division at Belleville, Ont., which position he was holding at the time of his recent promotion to superintendent of the Stratford division.

Joseph J. Ryan, whose promotion to terminal superintendent of the Chicago, Burlington & Quincy and the Colorado & Southern, with headquarters at Denver, Colo., was reported in the *Railway Age* of January 4, was born on October 3, 1896, at Quincy, Ill., and entered railway service in 1910 as messenger and call boy for the Burlington at Brookfield, Mo. Mr. Ryan later served successively, from 1923 to 1934, as yardmaster at Brookfield, St. Joseph, Mo., East St. Louis, Ill., and St. Louis, Mo. He was advanced to trainmaster at St. Joseph in 1934, holding this

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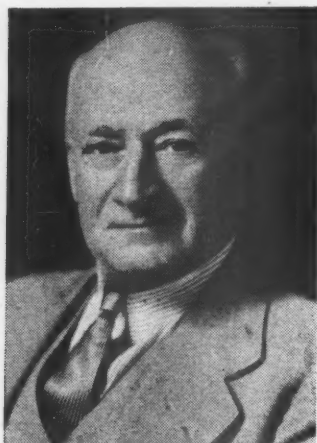
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SECURITY CIRCULATOR DIVISION

position later also at Galesburg, Ill., and Ottumwa, Iowa. He was appointed assistant division superintendent at Alliance, Neb., in 1942, and the following year was transferred to Lincoln, Neb., where he was located at the time of his recent promotion.

Wilson A. Jackson, whose retirement as general superintendent of telegraph and telephone of the New York Central at New York was reported in the *Railway Age* of January 11, was born on September 15, 1876, at Detroit, Mich. Mr. Jackson took an International Correspondence School course in electrical engineering. Entering railroad service on June 19, 1891, with the Michigan Central, he served successively as telegraph operator, train dispatcher, chief operator, manager-wire chief, and telegraph and telephone engineer, all at Detroit. On September 1, 1920, Mr. Jackson was appointed assistant superintendent telegraph, which position he held until January 1, 1928, when he was promoted to superintendent telegraph, becoming superintendent telegraph of the consolidated telegraph department on Novem-



Wilson A. Jackson

ber 1, 1931. He was appointed general superintendent telegraph and telephone of the New York Central at New York on January 1, 1941, which position he held until his retirement on December 31, 1946.

Frederick R. Bartles, whose retirement as general manager of the Northern Pacific, with headquarters at Seattle, Wash., was reported in the *Railway Age* of January 4, was born on February 28, 1875, at Williamsport, Pa., and was graduated from Lehigh University in 1896. Mr. Bartles entered railway service in 1897 with the Pennsylvania, and from 1899 to 1905 he was supervisor of track with the New York Central & Hudson River (now New York Central). He was assistant engineer with the Panama Canal from 1905 to 1907, at which time he joined the N. P. He advanced through various positions until his appointment as trainmaster of the Pasco (Wash.) division, and later served successively as superintendent of several divisions on the line. In 1931 he was advanced to assistant general manager, Eastern district, at St. Paul, Minn., and in 1940 he was transferred to Seattle. In 1942 he was promoted to general man-

ager, the position he held at the time of his retirement.

Raymond G. McGehee, whose appointment as superintendent of the Richmond division of the Chesapeake & Ohio at Richmond, Va., was reported in the *Railway Age* of January 18, was born at Rich-



Raymond G. McGehee

mond. He entered the service of the Chesapeake & Ohio in 1920 as rodman at Clifton Forge, Va., and subsequently served as material accountant in the engineering department at Russell, Ky.; assistant cost engineer and assistant division engineer in the maintenance of way department at Clifton Forge. Mr. McGehee was appointed trainmaster at Clifton Forge in March, 1939, the position he held at the time of his recent appointment as superintendent of the Richmond division.

D. S. Thomson, whose promotion to assistant general manager of the Eastern lines of the Canadian Pacific at Toronto, Ont., was reported in the *Railway Age* of January 11, was born at Cornwall, Ont., and entered railroad services in 1910 as messenger at the Angus shops of the Can-



D. S. Thomson

adian Pacific at Montreal. He was employed in the Montreal offices of that road until 1925, when he became statistician. From 1926 to 1935 Mr. Thomson was chief clerk to general manager at Montreal, becoming assistant superintendent at Smith's Falls, Ont., in the latter year. In 1936 he

was transferred to Sudbury, Ont., and in 1937, to the Bruce division. From December, 1937, to May, 1940, Mr. Thomson served as superintendent of the Trenton division, transferring to the Brownville division in the latter year. He was promoted to general superintendent of the Ontario district at Toronto in October, 1944, which position he held until his recent promotion to assistant general manager.

Theodore R. Beach, whose appointment as superintendent of the Peoria & Pekin Union, with headquarters at Peoria, Ill., was reported in the *Railway Age* of January, 18, was born on October 28, 1895, at Franklin, Ky., and entered railway service in 1912 with the Illinois Central. Mr. Beach served as clerk, telegraph operator and agent until 1924, when he was appointed freight agent at Springfield, Ill. From 1929 to 1937 he was general yardmaster there, and in the latter year he was appointed trainmaster. Mr. Beach served in World Wars I and II, attaining the rank of lieutenant colonel in the latter as commanding officer of the 743d Railway Operating Battalion. Following his re-



Theodore R. Beach

turn from military service, Mr. Beach became trainmaster at Mattoon, Ill., in which capacity he served until his new appointment.

TRAFFIC

J. D. Ritchie has been appointed general agent of the Chicago & North Western, with headquarters at Portland, Ore.

W. T. Yake has been appointed general freight agent of the Detroit & Mackinac, with headquarters at Tawas City, Mich.

S. R. Mason has been appointed assistant to coal manager of the Western Maryland, with headquarters at Baltimore, Md.

W. Cruickshank has been appointed general agent, passenger department, of the Canadian National, with headquarters at Prince Rupert, B. C.

Edward R. Lewis, assistant general freight agent of the Fort Dodge, Des Moines & Southern, with headquarters at Chicago, has been promoted to general freight agent, with the same headquarters.

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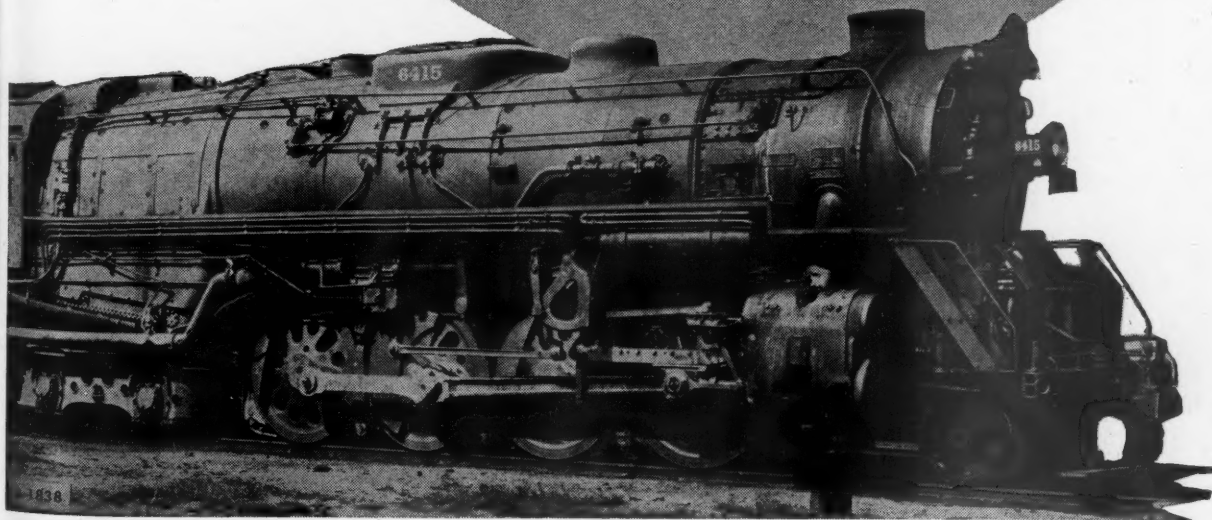
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January 25, 1947

Mr. Lewis' former position has been abolished.

Allen R. Gould, whose retirement as traffic manager—sales, of the Chicago & North Western, with headquarters at Chicago, was reported in the *Railway Age* of January 11, entered the service of the



Allen R. Gould

C. & N. W. in 1900 as chief clerk in the traffic offices at Cincinnati, Ohio. He later held positions as traveling agent at Cincinnati and general agent at Cleveland, Ohio, and Chicago. During World War I Mr. Gould was division freight and passenger agent at Madison, Wis., and following the end of federal control he became general agent at New York. He later returned to Chicago, where he became assistant passenger traffic manager, and from 1925 to 1938 he served as assistant freight and passenger traffic manager. Mr. Gould was promoted to assistant traffic manager in 1938, and traffic manager—sales in 1939.

Thomas H. Irwin, whose promotion to freight traffic manager of the Central of New Jersey at New York was reported in the *Railway Age*, January 11, was born at Mickleton, Gloucester county, N. J.



Thomas H. Irwin

He entered railroad service on May 26, 1902, as clerk in the general auditor's office of the Central of New Jersey at Philadelphia, Pa. On November 11, 1907, he was appointed traveling auditor and on July 15, 1926, he became lightering agent in the marine department. Mr. Irwin was

general freight agent in the freight traffic department of the Jersey Central and Reading from August 16, 1935, to January 1, 1939, and general freight agent of the Jersey Central from January 1, 1939, to November 1, 1944. He was appointed assistant freight traffic manager (sales and service) of that road at New York on November 1, 1944, the position he held until his recent promotion to freight traffic manager.

Ralph C. Kerr, whose promotion to freight traffic manager in charge of industrial development, Chicago & North Western, with headquarters at Chicago, was reported in the *Railway Age* of January, was born on April 7, 1881, at Pectonica, Ill., and entered railway service with the C. & N. W. in 1899 as a clerk in the ticket auditor's office at Chicago. He telegraph operator, cashier, traveling auditor, subsequently held positions as clerk and tor, and freight agent in charge of Milwaukee (Wis.) terminals. He was advanced to general agent, freight department, at Milwaukee in 1923, and in 1925 he became division freight and passenger agent at Green Bay, Wis. Mr. Kerr was assistant general freight agent at Chi-



Ralph C. Kerr

cago from 1927 to 1929, and in the latter year he was advanced to manager of the industrial department there. Prior to his recent appointment, Mr. Kerr had been assistant freight traffic manager at Chicago since 1935.

Cecil G. Kersey has been appointed district passenger agent of the Fort Worth & Denver City and the Wichita Valley, with headquarters at Dallas, Tex.

Frank J. Berry, assistant general freight and passenger agent of the Northern Pacific, with headquarters at Portland, Ore., has been promoted to western traffic manager, with headquarters at Seattle, Wash., succeeding **James L. Burnham**, whose death was reported in the *Railway Age* of January 11. **Frank A. Cleveland** and **Otto Kopp**, general freight agents at Seattle, have been promoted to western freight traffic managers. **G. W. Rodine**, general passenger agent at Seattle, has been advanced to western passenger traffic manager, and **S. W. Elmore**, general agent, freight department, has been promoted to general freight agent at Portland. Mr. Elmore is succeeded by **R. D. Bone**, district freight

and passenger agent at Aberdeen, Wash., who in turn is succeeded by **C. J. Ryan**, city freight and passenger agent at Tacoma, Wash.

R. C. Stubbs, whose promotion to freight traffic manager—sales, of the Chicago & North Western, with headquarters at Chi-



R. C. Stubbs

cago, was reported in the *Railway Age* of January 11, was born on December 31, 1904, at Morrow, Ohio, and entered railroad service in 1925 as a clerk in the traffic department of the C. & N. W. at Cincinnati, Ohio. He subsequently served as chief clerk to general agent at Philadelphia, Pa., and later became chief clerk to assistant freight and passenger traffic manager at Chicago. In 1938 he was advanced to division freight agent, and in 1940 he was appointed assistant general freight agent. On February 1, 1941, Mr. Stubbs became assistant traffic manager, the position he held at the time of his recent appointment.

Chandler H. Houston, traveling freight and passenger agent of the Missouri-Kansas-Texas, with headquarters at Dallas, Tex., has been promoted to division freight agent at that point.

Fred McGee, division freight and passenger agent of the Missouri-Kansas-Texas, with headquarters at Muskogee, Okla., has been transferred to Tulsa, Okla., where he succeeds **Tom L. Peeler, Jr.**, whose promotion to assistant to president at Houston, Tex., was reported in the *Railway Age* of January 18. Mr. McGee is succeeded by **Otha Thomas**, traveling freight and passenger agent at Birmingham, Ala.

Albert O. Olson, whose promotion to assistant freight traffic manager—sales, of the Chicago & North Western, with headquarters at Chicago, was reported in the *Railway Age* of January 11, was born on November 21, 1892, at Green Bay, Wis., and received his higher education at the University of Pittsburgh. He entered railroad service in 1906 as a call boy on the C. & N. W., at North Fond du Lac, Wis., and later held positions as yard clerk and yard agent, telegrapher, telegrapher-agent, car distributor, assistant yardmaster and ticket clerk. During World War I he served with the United States Army as an air service pilot. His career includes

Record of GM Diesels on Atlantic Coast Line

Locomotive Number	Month Delivered	Miles Operated	Miles Assigned	Per Cent Availability
500	11-39	1,422,391*	1,492,193	95.3
501	11-39	1,337,677*	1,445,476	92.5
502	11-40	1,262,239*	1,286,296	98.1
503	11-40	1,181,882*	1,222,250	96.7
504	11-40	1,205,601*	1,261,597	95.6
505	11-40	1,314,140*	1,349,702	97.4
506	11-40	1,200,676*	1,226,764	97.9
507	11-40	1,145,648*	1,186,921	96.5
508	12-40	1,279,680*	1,371,517	93.3
509	12-40	1,140,673*	1,228,823	92.8
510	12-40	1,162,645*	1,189,365	97.8
511	12-40	1,188,101*	1,257,202	94.5
512	12-40	1,227,639*	1,291,814	95.0
513	1-41	1,147,919*	1,268,667	90.5
514	1-41	1,148,386*	1,194,946	96.1
515	1-41	1,096,603*	1,148,338	95.5
516	1-42	887,526	931,119	95.3
517	1-42	886,823	976,261	90.8
518	3-42	833,170	871,875	95.6
519	3-42	835,878	894,840	93.4
520	3-42	927,468	996,879	93.0
521	3-42	790,189	836,286	94.5
522	4-42	807,526	835,653	96.6
523	4-42	800,606	885,546	90.4
524	3-45	294,447	297,467	99.0
525	3-45	291,961	298,080	97.9
526	4-45	278,048	286,535	97.0
527	4-45	285,584	294,740	96.9
528	4-45	257,606	272,526	94.5
529	6-45	234,432	237,032	98.9
530	8-45	203,606	213,982	95.2
531	8-45	195,787	202,751	96.6
532	6-46	44,101	44,771	98.5
533	6-46	40,604	43,914	92.5
534	6-46	45,360	46,030	98.5
535	6-46	43,278	43,948	98.5
536	6-46	43,329	43,999	98.5
537	6-46	42,967	43,637	98.5
750	11-40	1,204,068*	1,245,149	96.7
751	12-40	1,234,785*	1,320,320	93.5
752	1-41	1,056,473*	1,171,221	90.2
753	1-41	1,215,104*	1,244,749	97.6
754	1-42	996,568	1,022,082	97.5
755	3-45	257,690	276,786	93.1
756	4-45	287,624	287,624	100.0
757	4-45	257,351	270,044	95.3
758	4-45	255,881	265,110	96.5
759	6-45	241,269	241,269	100.0
760	6-45	221,007	223,607	98.8
761	8-45	194,712	198,040	98.3
762	8-45	196,483	205,483	95.6
763	8-45	210,566	210,566	100.0
764	8-45	172,123	180,014	95.6
Total		36,533,900	38,381,806	95.2

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service as city agent at Cleveland, Ohio; district agent, Green Bay; traveling agent, New York; general agent, Kansas City, Mo.; and, later, general agent at Pittsburgh, Pa. Mr. Olson was advanced to



Albert O. Olson

general freight agent at Chicago in 1941, the position he held at the time of his current promotion.

Harold A. Gundersen, whose promotion to freight traffic manager—rates, of the Chicago & North Western, with headquarters at Chicago, was reported in the *Railway Age* of January 11, was born on August 1, 1899, at Chicago, and entered railroad service in 1914 as a messenger on the C. & N. W. He subsequently served as clerk, tariff compiler, chief clerk to general freight agent, traveling freight agent and chief clerk to freight traffic manager. In 1940 he was advanced to as-



Harold A. Gundersen

sistant general freight agent, and on January 1, 1945, he was promoted to general freight agent. Mr. Gundersen held the latter position at the time of his new appointment.

Theron P. Hinchcliff, whose retirement as assistant passenger traffic manager of the Chicago, Burlington & Quincy, with headquarters at Chicago, was reported in the *Railway Age* of January 11, was born on April 8, 1882, at Amboy, Ill. Mr. Hinchcliff entered railway service in 1899 as a clerk with the Colorado & Southern at Denver, Colo., and held various positions with that road until 1910, when he joined the C. B. & Q. as city freight agent at

Cleveland, Ohio. He subsequently held positions at various points on the road, including traveling freight agent, chief clerk to assistant general freight agent, general agent and chief clerk to regional director. In 1925 he was appointed assistant general passenger agent at Chicago, and the following year was promoted to general passenger agent at St. Louis, Mo. From 1933 to 1939 he was assistant general passenger agent at Omaha, Neb., and was promoted to general passenger agent there in the latter year. Mr. Hinchcliff had been assistant passenger traffic manager at Chicago since August 1, 1943.

ENGINEERING & SIGNALING

D. B. McKillop has been appointed division engineer of the Canadian National, with headquarters at Regina, Sask.

Thomas W. White, district engineer of the Canadian National, with headquarters at Edmonton, Alta., has retired.

H. L. Roblin, division engineer of the Canadian National, at Regina, Sask., has been promoted to district engineer of the Alberta district, with headquarters at Edmonton, Alta.

J. Ayer, Jr., assistant signal engineer of the Denver & Rio Grande Western, has been appointed assistant engineer of capital expenditures, with headquarters at Denver, Colo., succeeding C. D. Johnson, whose recent death is reported elsewhere in these columns.

James S. Wearn, assistant chief engineer maintenance of way and structures of the Central lines of the Southern, with headquarters at Knoxville, Tenn., has been promoted to chief engineer maintenance of way and structures of the Western lines at Cincinnati, Ohio, succeeding D. William Brosnan, whose appointment as general manager of the Central lines at Knoxville is noted elsewhere in these columns.

Clyde Barber has been appointed assistant superintendent communications and signals of the Seaboard Air Line, with headquarters at Norfolk, Va., a change of title. L. H. Hiers has been appointed assistant to superintendent communications and signals, at Norfolk, a change of title. The positions of assistant superintendent telegraph and signals and assistant to superintendent telegraph and signals have been abolished.

T. M. Goodfellow, division engineer of the Columbus division of the Pennsylvania, at Columbus, Ohio, has been transferred to the Pittsburgh division, with headquarters at Pittsburgh, Pa. L. W. Green, division engineer of the Delmarva division, at Cape Charles, Va., has been transferred to the Columbus division, with headquarters at Columbus. George Baylor, assistant division engineer of the Ft. Wayne division, at Ft. Wayne, Ind., becomes division engineer of the Delmarva division, with headquarters at Cape Charles. J. F. Piper, supervisor of track on the Maryland division, at Wilmington, Del., becomes assistant division engineer of the Ft. Wayne division, at Ft. Wayne.

Robert Woodcock, assistant division engineer on the Philadelphia division, at Harrisburg, Pa., has been appointed assistant to engineer maintenance of way on the Eastern Pennsylvania division, with the same headquarters, succeeding F. C. Putney, who has retired. S. M. Rodgers, supervisor of track on special duty in the accounting department at Philadelphia, has been appointed assistant division engineer on the Philadelphia division, with headquarters at Harrisburg.

J. E. Gault, roadmaster of the Chicago, Indianapolis & Louisville, at Lafayette, Ind., has been appointed assistant chief engineer, with the same headquarters, a newly-created position. C. M. Bowman, assistant engineer at Lafayette, has been appointed assistant engineer—maintenance, with headquarters at Bloomington, Ind., a newly-created position. W. F. Smock, assistant to the chief engineer, at Lafayette, has been appointed office engineer, with the same headquarters, a newly-created position.

MECHANICAL

R. W. Rogers, assistant general manager of the Seaboard Air Line, has been promoted to chief mechanical officer, with headquarters as before at Norfolk, Va., succeeding L. A. Porter, who has been assigned to other duties.

D. Beath has been appointed master mechanic of the Manitoba district of the Canadian Pacific, and W. Stewart has been appointed master mechanic of the Saskatchewan district, with headquarters at Moose Jaw, Sask.

Robert James Needham, mechanical and electrical engineer of the Central region of the Canadian National at Toronto, Ont., has retired after many years of service. W. D. Taylor has been appointed electrical engineer of the Central region at Toronto. Mr. Needham was born at London, Ont., in 1882 and received his B. S. degree from McGill University in 1910. He was engaged as foreman operator with the Detroit Edison Company from 1910 to 1911, and entered railroad service in the latter year as electrical engineer with the Grand Trunk. Mr. Needham served in that capacity until 1919, when he became mechanical and electrical engineer for that road and later the Canadian National.

W. R. Harrison, whose retirement as mechanical superintendent of the Atchison, Topeka & Santa Fe, with headquarters at Amarillo, Tex., was reported in the *Railway Age* of January 4, was born near Dardnelle, Ark., on September 4, 1881. He entered railroad service on September 1, 1896, as an apprentice with the Southern at Princeton, Ind., and served as a machinist on other railroads before he entered the service of the Santa Fe. He was promoted to night roundhouse foreman in 1912, to day roundhouse foreman in 1913, and to general foreman at Newton, Kan., on August 1, 1914. Mr. Harrison was appointed master mechanic at Chanute, Kan., on November 10, 1917, and was transferred to Argentine, Kan., on September 1, 1922.

On February 1, 1934, he was promoted to superintendent of shops at Albuquerque, N. M., and served in that capacity until June 1, 1939, when he was advanced to mechanical superintendent, at Amarillo, the position he held at the time of his retirement.

Elmer V. Myers, whose promotion to superintendent of motive power of the St. Louis Southwestern of Texas, with headquarters at Tyler, Tex., was reported in the *Railway Age* of January 11, was born on February 2, 1897, at Whitney, Tex., and received his higher education through the International Correspondence Schools and an extension course of the University of Texas. Mr. Myers entered railway service in 1915 as a machinist apprentice with the Gulf, Colorado & Santa Fe (part of the Atchison, Topeka & Santa Fe), and from 1918 to 1920 was employed as machinist. He subsequently held positions with several roads, joining the Cotton Belt as a



Elmer V. Myers

machinist in 1923. He held various mechanical positions until August 11, 1936, when he was appointed night roundhouse foreman. In October of that year he became lead machinist, which position he held until 1939, when he was appointed erecting shop foreman. Mr. Myers was advanced to assistant general locomotive foreman in 1942, and to general locomotive foreman in 1943, which position he held at the time of his recent promotion.

B. J. Peasley, whose retirement as superintendent of motive power of the St. Louis Southwestern of Texas, with headquarters at Tyler, Tex., was reported in the *Railway Age* of January 11, was born on December 21, 1867, at Terre Haute, Ill., and received his higher education at St. Viatus College, Kankakee, Ill., and business college at Burlington, Iowa. Mr. Peasley began his railroad career in 1883 as an apprentice machinist of the Chicago, Burlington & Quincy at Burlington, and subsequently held various minor positions with several roads. In 1908 he was appointed master mechanic of the Missouri Pacific at Ferriday, La., and in 1909 was transferred to De Soto, Mo. He was advanced to superintendent of shops at North Little Rock, Ark., in 1914, and joined the St. L. S. W. of Texas as mechanical superintendent at Tyler in 1917. The following year he became superintendent

of motive power of the Vicksburg, Shreveport & Pacific (now part of the Illinois Central), at Monroe, La., and in 1920 he was appointed to that position on the Cot-



B. J. Peasley

ton Belt, in which capacity he served until his retirement.

G. A. Hannon, rule instructor of the Canadian National, at Winnipeg, Man., has been appointed assistant superintendent and master mechanic of the Smithers division, with headquarters at Prince George, B. C. **C. E. Stewart**, master mechanic of the Northern Alberta, at Edmonton, Alta., has been appointed superintendent of motive power and car equipment of the British Columbia district, with headquarters at Vancouver, B. C.

Mr. Stewart was born at Detroit, Mich., and entered railroad service in 1906 as a machinist apprentice with the Canadian Northern, at Edmonton. After serving in the mechanical department of the Grand Trunk Pacific at various points, he was promoted to locomotive foreman in 1914. In 1919 he was appointed general foreman, in which capacity he served until 1938, when he was granted a leave of absence to accept the position he held at the time of his recent appointment.

PURCHASES AND STORES

W. H. Boylan has been appointed acting division storekeeper of the Chicago & North Western, with headquarters at Proviso, Ill., replacing **T. E. Sullivan**, who has been granted a leave of absence.

SPECIAL

Dr. Daniel W. Myers has been appointed medical director of the New York Central, with headquarters at Detroit, Mich., succeeding **Dr. George P. Myers**, who has retired.

C. W. Stanley has been appointed director of personnel of the Chicago, Indianapolis & Louisville, with headquarters at Lafayette, Ind.

J. P. Brindley has been appointed superintendent of safety of the Chicago, Rock Island & Pacific, with headquarters at Chicago, succeeding **F. A. Bouge**, whose death was reported in the *Railway Age* of November 23, 1946.

Harry E. Boyle has been appointed chief special agent of the Chicago, Rock

Island & Pacific, with headquarters at Kansas City, Mo., succeeding **Carl I. Demmitt**, whose death is reported elsewhere in these columns.

OBITUARY

Walter E. Scott, general agent of the Chicago & North Western, with headquarters at Portland, Ore., recently died suddenly at his home there.

H. G. Dalton, structural engineer of the Chicago, Burlington & Quincy, at Chicago, died on January 14 at Wilmette, Ill.

Carl I. Demmitt, chief special agent of the Chicago, Rock Island & Pacific, with headquarters at Kansas City, Mo., died suddenly in that city recently.

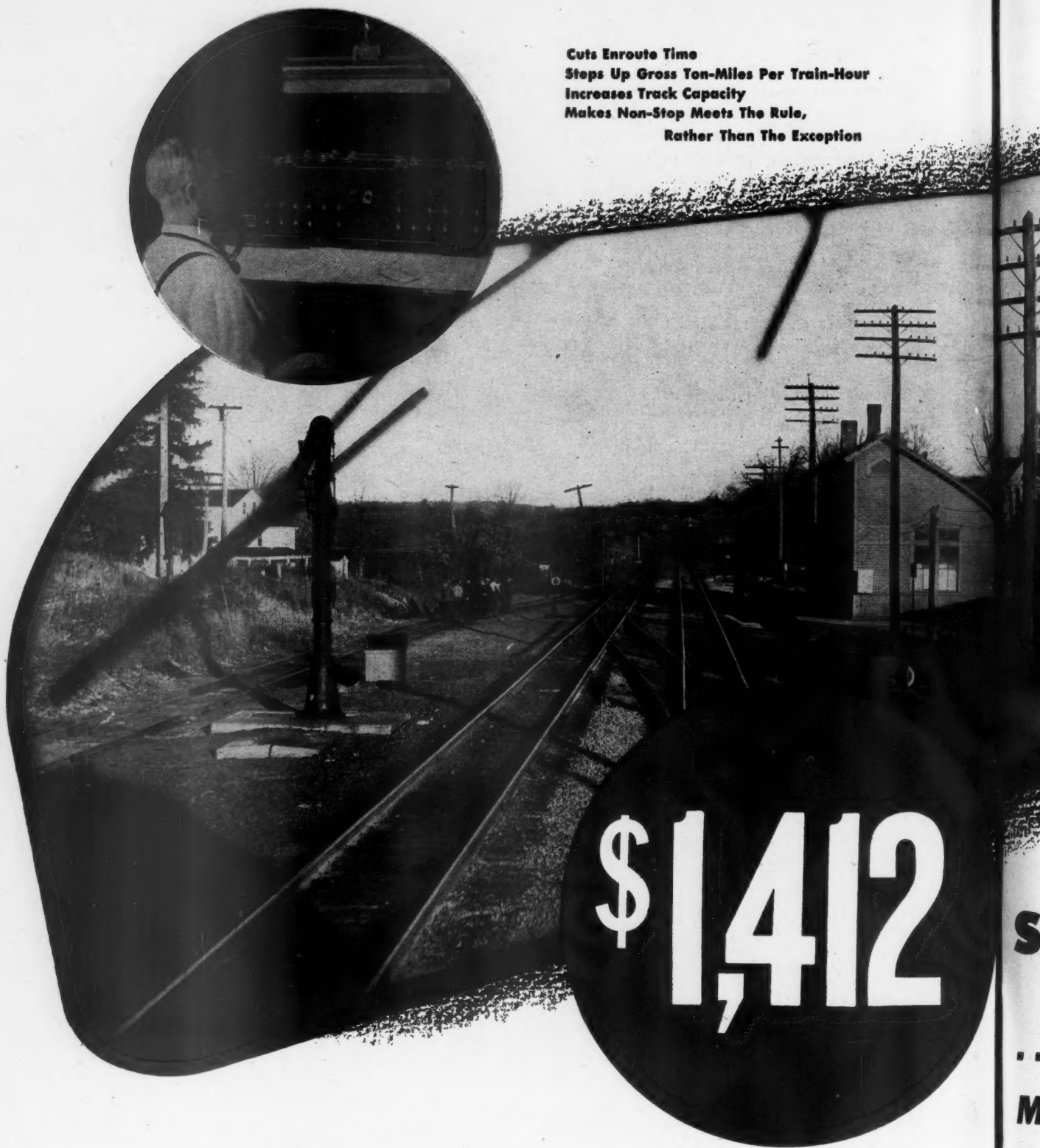
C. D. Johnson, assistant engineer of capital expenditures of the Denver & Rio Grande Western, with headquarters at Denver, Colo., died on December 25, 1946.

Frederick E. Evans, superintendent of car service of the Fruit Growers Express Company, died suddenly on January 20 at his home in Washington, D. C., at the age of 67. Mr. Evans was born at Washington and educated in the public schools there. Entering the service of the Southern 53 years ago, he served that road at St. Louis, Mo., for 20 years. He had been with the Fruit Growers Express at Washington since 1920.

J. Gordon Johnson, vice-president and general manager of the Manistee & Northwestern, with headquarters at Manistee, Mich., whose death on January 6 was reported in the *Railway Age* of January 11, was born on August 7, 1892, at Manistee, and entered railway service there in 1910 as a clerk in the auditor's office of the M. & N. Mr. Johnson served as an infantry lieutenant during World War I, returning to the M. & N. in 1919 as chief clerk. From 1925 to 1931 he was general freight and passenger agent and during the period from 1931 to 1945, he served as general manager and traffic manager. Mr. Johnson had been vice-president and general manager since 1945.

Colonel John Carmichael, superintendent of stores of the Western Maryland at Hagerstown, Md., died on January 7 of a heart condition, at his home in that city, at the age of 71. Mr. Carmichael was born at Lexington, Va., on May 17, 1875, and attended schools in Lexington and the Washington and Lee University. During World War I he served in the Army engineers, spending a year overseas; he was retired with the rank of colonel. After being employed by the Baltimore & Ohio in the maintenance of way department, Colonel Carmichael entered the service of the Western Maryland in 1902 and served successively until 1931 as assistant engineer at Hancock, Md.; division engineer at Hancock; roadmaster at Union Bridge, Md.; engineer maintenance of way at Baltimore, Md.; engineer at Hagerstown and special representative at Hagerstown. He was appointed superintendent of stores at Hagerstown in 1931, the position he held at the time of his death.

Cuts Enroute Time
Steps Up Gross Ton-Miles Per Train-Hour
Increases Track Capacity
Makes Non-Stop Meets The Rule,
Rather Than The Exception



General

Railway Signal Company

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On 62 track-miles on the D&RGW, G-R-S CTC saves \$221,729 yearly. On 5.5 track-miles on the GTW, it saves \$6,000. On ten railroads, selected at random, it saves \$568,202 on 235.1 track-miles — *\$1,412 per track-mile per year!*

These are savings on operating and maintenance costs. G-R-S CTC increases the earning power of your road in many other ways, as well. It steps up gross ton-miles per train-hour. It cuts enroute time of freights and passenger trains. It increases track capacity.

You will be amazed at the savings you can obtain by installing G-R-S CTC on your road.

SAVED per track-mile per year

**... In Operating And
Maintenance Costs Alone
... On Ten Railroads
Using G·R·S CTC**

It may be the answer to the increasing competition of other forms of transportation. Its benefits vary from road to road, but a G-R-S engineer can tell you in advance how this modern system of traffic control will return far more than it costs on *your* road. Call on him, without obligation, at our nearest district office.

Freight Operating Statistics of Large Steam Railways—Selected

Region, road, and year	Miles of road operated	Train-miles	Locomotive-miles		Car-miles		Ton-miles (thousands)		Road locos. on line					
			Principal and helper	Light	Loaded (thousands)	Per cent loaded	Gross excl. locos. & tenders	Net-rev. and non-rev.	Serviceable		B. O.	Per cent B. O.		
									Unstored	Stored				
New England Region:														
Boston & Albany.....1946	362	157,400	174,348	25,417	3,854	66.6	237,500	97,602	60	2	27	30.3		
.....1945	362	145,202	158,971	21,342	3,411	68.6	203,824	83,878	65	9	17	18.7		
Boston & Maine.....1946	1,750	338,251	348,624	12,746	13,216	72.4	808,465	364,365	107	18	14	10.1		
.....1945	1,777	319,707	330,247	11,700	11,747	74.7	694,688	309,890	114	7	25	17.1		
N. Y., New H. & Hartf*.....1946	1,820	395,299	533,205	42,258	16,097	74.0	926,956	415,906	190	13	67	23.5		
.....1945	1,815	382,225	540,204	46,730	15,020	75.0	826,665	355,832	205	30	33	17.4		
Great Lakes Region:														
Delaware & Hudson.....1946	846	305,015	371,792	38,520	13,530	69.9	960,757	524,062	117	54	34	16.6		
.....1945	846	259,178	305,651	28,362	10,883	69.4	737,644	383,464	109	77	29	13.5		
Del., Lack. & Western.....1946	971	332,735	379,189	46,942	14,651	73.8	933,512	442,995	112	21	38	22.2		
.....1945	971	306,991	342,027	40,147	13,123	71.6	842,030	395,891	109	38	56	27.6		
Erie.....1946	2,242	824,997	880,581	79,253	42,103	69.9	2,680,132	1,162,934	265	25	95	24.7		
.....1945	2,243	768,676	816,374	63,957	37,236	68.1	2,377,540	994,129	271	48	73	18.6		
Grand Trunk Western.....1946	972	285,068	290,969	2,549	9,803	69.1	612,340	267,725	67	1	7	9.3		
.....1945	1,026	258,508	263,464	1,805	8,087	69.9	510,895	230,107	68	1	7	9.2		
Lehigh Valley.....1946	1,242	319,555	355,950	60,577	14,863	73.8	978,052	500,052	117	15	37	21.9		
.....1945	1,242	320,047	351,511	46,384	13,244	68.0	920,759	463,862	127	32	10	5.9		
New York Central.....1946	10,328	3,433,716	3,692,173	246,472	131,320	65.8	8,853,802	4,151,782	1,053	21	312	22.5		
.....1945	10,331	2,993,850	3,200,989	208,707	105,726	64.7	7,047,881	3,186,504	1,004	78	301	21.8		
New York, Chi. & St. L.....1946	1,656	608,559	612,041	7,578	26,410	75.5	1,591,478	744,968	136	7	21	12.8		
.....1945	1,656	560,803	571,399	7,164	22,419	70.9	1,378,432	597,638	147	27	20	10.3		
Pere Marquette.....1946	1,913	401,342	410,215	9,697	13,821	68.7	900,412	410,862	128	1	34	20.9		
.....1945	1,915	320,346	330,507	8,966	10,516	72.8	671,382	318,925	110	25	26	16.1		
Pitta. & Lake Erie.....1946	229	102,696	104,028	81	4,115	64.5	340,165	195,180	33	5	12	24.0		
.....1945	229	73,436	73,436	8	2,474	62.2	206,117	115,676	32	6	12	24.0		
Wabash.....1946	2,381	690,199	708,734	17,289	25,539	74.4	1,592,764	733,676	160	9	39	18.8		
.....1945	2,381	636,976	657,521	16,788	22,362	74.3	1,392,468	641,929	149	18	44	20.9		
Central Eastern Region:														
Baltimore & Ohio.....1946	6,103	2,088,183	2,589,498	289,862	74,352	68.1	5,192,841	2,626,357	821	10	334	28.7		
.....1945	6,095	2,006,011	2,477,522	252,075	68,592	64.4	4,895,737	2,394,808	874	74	233	19.7		
Central of New Jersey*.....1946	419	88,361	101,170	22,735	3,538	68.4	249,898	132,508	64	..	27	29.7		
.....1945	654	174,768	199,073	39,891	6,100	66.7	442,717	233,958	97	12	39	26.4		
Central of Pennsylvania.....1946	230	88,345	105,106	22,827	3,274	69.8	234,861	127,807	40	..	24	37.5		
.....1945	..	..	..	..	..	..	..	..	..	..	..	..
Chicago & Eastern Ill.....1946	910	196,025	197,700	4,403	5,939	72.3	391,763	199,243	59	..	21	26.3		
.....1945	912	188,684	190,210	4,453	5,007	70.4	333,613	166,428	57	9	9	12.0		
Elgin, Joliet & Eastern.....1946	391	122,445	127,189	3,549	3,831	68.8	289,529	158,387	45	1	16	25.8		
.....1945	392	105,133	109,565	3,575	3,083	68.3	233,083	125,508	44	3	26	35.6		
Long Island.....1946	372	48,023	49,659	17,988	643	59.9	43,174	17,633	38	..	3	7.3		
.....1945	372	43,309	44,946	16,450	517	58.8	34,265	13,727	50	..	3	5.7		
Pennsylvania System.....1946	10,033	4,257,103	4,931,436	678,110	174,049	69.0	11,919,414	6,061,586	1,924	30	260	11.7		
.....1945	10,024	3,770,916	4,373,068	595,642	145,447	65.4	10,062,190	4,833,925	1,886	130	215	9.6		
Reading.....1946	1,361	539,238	599,062	70,770	18,119	67.2	1,369,368	758,819	252	24	51	15.6		
.....1945	1,365	523,609	583,145	67,437	16,799	63.6	1,278,345	682,648	268	17	49	14.7		
Pocahontas Region:														
Chesapeake & Ohio.....1946	3,067	1,256,383	1,351,978	70,508	59,213	58.0	5,067,299	2,952,124	463	..	65	12.3		
.....1945	3,045	838,824	903,287	38,895	34,100	58.6	2,760,306	1,580,147	458	8	44	8.6		
Norfolk & Western.....1946	2,139	806,088	859,027	60,415	37,781	60.0	3,216,613	1,767,448	260	42	22	6.8		
.....1945	2,139	618,559	657,693	42,995	26,808	60.1	2,205,075	1,169,777	245	88	19	5.4		
Southern Region:														
Atlantic Coast Line.....1946	5,554	944,624	959,926	16,080	25,302	70.0	1,566,751	736,571	372	50	33	7.3		
.....1945	5,553	948,548	964,541	12,282	23,953	66.7	1,550,800	701,623	397	6	33	7.6		
Central of Georgia*.....1946	1,783	318,448	324,894	6,917	8,072	73.0	521,916	243,251	92	..	9	8.9		
.....1945	1,783	310,614	318,009	5,501	7,552	70.3	489,285	226,999	95	..	9	8.7		
Gulf, Mobile & Ohio.....1946	1,931	265,431	321,777	2,139	10,340	77.9	641,766	319,010	109	8	7	5.6		
.....1945	1,931	306,651	368,152	4,393	10,825	75.2	685,719	338,294	107	1	6	5.3		
Illinois Central.....1946	6,582	1,476,816	1,489,945	53,412	57,020	69.3	3,812,766	1,868,406	590	6	93	13.5		
.....1945	6,605	1,443,243	1,454,828	52,059	52,056	64.3	3,636,842	1,718,665	608	47	59	8.3		
Louisville & Nashville.....1946	4,750	1,540,005	1,669,236	46,268	41,674	65.5	2,947,504	1,532,920	401	13	56	11.9		
.....1945	4,749	1,410,037	1,514,588	34,800	33,677	65.6	2,307,705	1,151,787	399	28	59	12.1		
Seaboard Air Line.....1946	4,143	819,950	874,120	14,141	25,416	73.5	1,615,596	759,704	268	4	58	17.6		
.....1945	4,159	794,296	828,272	18,838	24,197	73.4	1,499,644	694,424	272	1	69	20.2		
Southern.....1946	6,450	2,096,610	2,134,422	38,181	50,657	74.6	3,099,629	1,446,916	604	..	103	14.6		
.....1945	6,471	1,941,425	1,971,530	32,700	45,479	71.2	2,820,334	1,299,132	614	18	115	15.4		
Northwestern Region:														
Chi. & North Western.....1946	8,062	1,225,992	1,279,689	34,088	40,564	70.4	2,654,668	1,156,074	372	..	144	27.9		
.....1945	8,062	1,209,560	1,257,633	28,772	38,387	65.2	2,603,656	1,209,190	388	17	110	21.4		
Chicago Great Western.....1946	1,445	285,805	287,586	16,280	9,406	75.7	588,536	273,706	66	..	14	17.5		
.....1945	1,445	285,150	289,728	8,185	9,049	69.2	589,570	258,558	73	..	7	8.8		
Chi., Milw., St. P. & Pac.....1946	10,725	1,619,630	1,711,952	72,084	55,784	67.6	3,681,574	1,707,817	496	26	96	15.5		
.....1945	10,723	1,497,781	1,589,815	92,821	52,153	67.5	3,473,363	1,627,070	503	17	90	14.8		
Chi., St. P., Minneap. & Om.....1946	1,606	237,400	253,777	16,424	6,537	71.2	435,210	197,743	86	..	39	31.2		
.....1945	1,606	221,952	240,617	14,025	6,148	73.1	404,091	193,772	93	6	25	20.2		
Duluth, Missabe & Iron Range.....1946	547	144,031	144,576	1,022	7,537	50.9	709,258	434,537	48	..	2	4.0		
.....1945	546	146,515	147,221	1,403	8,180	51.2	745,696	454,875	50	..	1	2.0		
Great Northern.....1946	8,236	1,330,245	1,339,465	53,610	53,620	62.9	3,916,425	1,795,547	392	17	99	19.5		
.....1945	8,275	1,219,537	1,219,770	43,861	47,607	60.5	3,552,935	1,622,035	374	58	53	10.9		
Minneap., St. P. & S. St. M.....1946	4,181	525,672	535,973	10,409	15,679	67.2	1,074,927	521,782	124	..	15	10.8		
.....1945	4,259	530,985	544,149	11,643	15,303	64.5	1,080,266	518,960	130	1	11	7.7		
Northern Pacific.....1946	6,624	1,038,807	1,115,339	70,241	40,745	68.8	2,760,548	1,289,589	376	2	49	11.5		
.....1945	6,577	953,483	1											

lected
ne

Per cent
B. O.

Items for the Month of October 1946 Compared with October 1945

Region, road, and year	Freight cars on line			Per Cent B. O.	G.t.m. per train-hr. excl. locos. and tenders	G.t.m. per train-mi. excl. locos. and tenders	Net ton-mi. per train-mile	Net ton-mi. per l'd. car-mile	Net ton-mi. per car-day	Car miles per car-day	Net daily ton-mi. per road-mi.	Coal lb. per 1000 g.t.m. inc. loco.	Ml. per loco. per day	
	Home	Foreign	Total											
New England Region:														
Boston & Albany.....1946	304	6,032	6,336	0.4	22,795	1,513	622	25.3	518	30.7	8,697	190	81.4	
.....1945	256	4,530	4,786	0.3	21,776	1,416	583	24.6	529	31.3	7,474	210	70.6	
Boston & Maine.....1946	1,651	12,221	13,872	2.5	35,535	2,394	1,079	27.6	874	43.8	6,716	100	89.2	
.....1945	2,011	11,454	13,465	1.6	33,174	2,177	971	26.4	763	38.7	5,625	105	81.1	
N. Y., New H. & Hartf*.....1946	1,463	22,820	24,283	2.2	31,311	2,351	1,055	25.8	571	29.9	7,372	89	75.6	
.....1945	2,539	18,475	21,014	5.4	29,465	2,168	933	23.7	547	30.8	6,324	90	74.9	
Great Lakes Region:														
Delaware & Hudson.....1946	2,499	7,701	10,200	3.1	53,773	3,168	1,728	38.7	1,682	62.1	19,983	104	66.9	
.....1945	4,255	5,226	9,481	3.9	48,443	2,865	1,489	35.2	1,305	53.4	14,622	108	52.2	
Del., Lack. & Western.....1946	3,914	14,751	18,665	3.4	41,513	2,849	1,352	30.2	769	34.4	14,717	108	89.6	
.....1945	5,780	10,075	15,855	4.1	40,853	2,780	1,307	30.2	796	36.9	13,152	112	67.8	
Erie.....1946	5,513	32,156	37,669	2.1	52,973	3,280	1,423	27.6	1,036	53.6	16,732	94	88.2	
.....1945	11,225	22,219	33,444	5.4	51,322	3,116	1,303	26.7	916	50.3	14,297	99	79.9	
Grand Trunk Western.....1946	3,632	11,062	14,694	5.5	40,885	2,158	943	27.3	598	31.7	8,885	92	137.8	
.....1945	2,934	7,907	10,841	4.3	40,377	1,985	894	28.5	698	35.1	7,235	87	122.4	
Lehigh Valley.....1946	4,678	15,284	19,962	3.4	50,858	3,163	1,617	33.6	868	35.0	12,988	106	84.2	
.....1945	8,110	13,963	22,073	4.2	49,482	2,974	1,498	35.0	675	28.3	12,048	105	80.6	
New York Central.....1946	43,128	116,809	159,937	3.5	39,331	2,610	1,224	31.6	856	41.2	12,968	104	104.5	
.....1945	50,313	76,721	127,034	4.5	38,249	2,392	1,082	30.1	772	39.6	9,950	113	89.1	
New York, Chi. & St. L.....1946	1,751	13,025	14,776	1.8	49,141	2,627	1,229	28.2	1,597	75.0	14,512	82	126.9	
.....1945	2,986	12,387	15,373	3.2	46,309	2,466	1,069	26.7	1,257	66.5	11,642	94	103.6	
Pere Marquette.....1946	3,263	13,639	16,902	3.1	37,269	2,255	1,029	29.7	775	37.9	6,928	95	90.6	
.....1945	4,420	9,894	14,314	4.9	36,903	2,112	1,003	30.3	786	35.6	5,372	94	74.6	
Pitts. & Lake Erie.....1946	2,377	9,366	11,743	3.4	49,608	3,326	1,909	47.4	509	16.7	27,494	97	72.8	
.....1945	5,100	8,212	13,312	3.7	43,040	2,811	1,578	46.8	280	9.6	16,295	85	54.1	
Wabash.....1946	5,007	17,859	22,866	2.8	43,381	2,331	1,074	28.7	1,119	52.3	9,940	107	118.8	
.....1945	6,275	12,932	19,207	4.7	41,714	2,201	1,015	28.7	1,080	50.6	8,697	113	108.3	
Central Eastern Region:														
Baltimore & Ohio.....1946	34,119	52,765	86,884	4.1	31,227	2,537	1,283	35.3	964	40.1	13,882	148	82.6	
.....1945	42,673	52,986	95,659	5.1	31,010	2,498	1,222	34.9	795	35.4	12,675	150	77.6	
Central of New Jersey*.....1946	818	10,912	11,730	2.9	35,187	2,915	1,546	37.5	373	14.6	10,202	126	67.1	
.....1945	3,930	13,515	17,445	7.6	29,988	2,621	1,385	38.4	433	16.9	11,540	122	67.1	
Central of Pennsylvania.....1946	1,038	3,731	4,769	8.4	32,972	2,758	1,501	39.0	825	30.3	17,925	129	71.3	
.....1945	1,688	4,102	5,790	5.1	34,712	2,029	1,032	33.5	1,071	44.1	7,063	114	86.8	
Chicago & Eastern Ill.....1946	2,444	3,775	6,219	8.2	30,930	1,782	889	33.2	867	37.0	5,887	127	86.3	
.....1945	6,565	11,370	17,935	1.9	18,197	2,498	1,367	41.3	297	10.4	13,067	128	98.7	
Elgin, Joliet & Eastern.....1946	7,893	5,470	13,363	2.6	19,013	2,315	1,247	40.7	295	10.6	10,328	140	68.8	
.....1945	53	6,371	6,424	.5	6,936	919	375	27.4	92	5.6	1,529	320	78.8	
Long Island.....1946	25	5,608	5,633	.3	6,624	804	322	26.6	79	5.0	1,190	315	53.5	
.....1945	117,692	131,392	249,084	8.8	36,847	2,898	1,474	34.8	787	32.8	19,489	120	89.2	
Pennsylvania System.....1946	127,216	111,066	238,282	5.8	38,005	2,746	1,319	33.2	651	30.0	15,556	128	78.5	
.....1945	9,161	24,366	33,527	2.5	32,347	2,543	1,409	41.9	722	25.7	17,985	110	77.5	
Reading.....1946	11,920	22,036	33,956	2.6	30,838	2,451	1,309	40.6	645	25.0	16,133	116	73.5	
.....1945	33,184	24,257	57,441	1.6	57,348	4,138	2,411	49.9	1,661	57.5	31,050	77	95.1	
Pocahontas Region:1945	44,987	17,097	62,084	1.7	49,401	3,347	1,916	46.3	866	31.9	16,740	87	65.6
Chesapeake & Ohio.....1946	22,780	8,436	31,216	.5	62,774	4,045	2,223	46.8	1,823	64.9	26,655	89	99.6	
.....1945	30,192	6,962	37,154	1.9	57,794	3,614	1,917	43.6	1,072	40.8	17,641	95	70.2	
Southern Region:														
Atlantic Coast Line.....1946	7,519	20,309	27,828	3.8	26,674	1,664	782	29.1	896	44.0	4,278	117	75.0	
.....1945	8,869	19,362	28,231	1.5	26,718	1,646	745	29.3	796	40.8	4,076	123	77.7	
Central of Georgia*.....1946	1,109	6,382	7,491	1.2	30,139	1,644	766	30.1	1,031	46.8	4,401	136	113.5	
.....1945	1,946	7,377	9,323	1.2	29,003	1,580	733	30.1	818	38.7	4,107	138	108.5	
Gulf, Mobile & Ohio.....1946	1,321	6,188	7,509	1.5	41,793	2,422	1,204	30.9	1,471	61.2	5,329	92	89.7	
.....1945	2,024	7,109	9,133	.8	36,622	2,241	1,106	31.3	1,143	48.6	5,651	118	116.9	
Illinois Central.....1946	12,901	35,166	48,067	1.1	43,137	2,653	1,300	32.8	1,255	55.2	9,157	119	77.3	
.....1945	21,751	37,205	58,956	.9	40,593	2,581	1,220	33.0	1,037	48.8	8,394	122	73.5	
Louisville & Nashville.....1946	23,489	16,866	40,355	3.8	29,181	1,914	995	36.8	1,233	51.2	10,410	124	122.5	
.....1945	30,735	15,695	46,448	3.9	26,279	1,637	817	34.2	812	36.2	7,824	134	108.8	
Seaboard Air Line.....1946	5,005	19,026	24,031	1.6	34,184	2,017	948	29.9	1,063	48.4	5,915	116	96.2	
.....1945	6,303	18,263	24,566	1.7	32,383	1,923	890	28.7	962	45.7	5,386	123	90.1	
Southern.....1946	12,681	32,810	45,491	4.1	25,158	1,496	698	28.6	1,015	47.7	7,236	139	104.9	
.....1945	16,516	35,757	52,273	4.5	25,003	1,472	678	28.6	833	41.0	6,476	149	92.7	
Northwestern Region:														
Chi. & North Western.....1946	19,008	37,852	56,940	3.1	32,302	2,299	1,001	28.5	637	31.7	4,626	125	88.8	
.....1945	20,771	31,895	52,666	3.7	31,660	2,243	1,042	31.5	692	33.7	4,838	128	85.5	
Chicago Great Western.....1946	902	5,990	6,892	3.7	35,136	2,063	960	29.1	1,384	62.8	6,110	126	129.6	
.....1945	1,103	5,410	6,513	3.3	35,399	2,079	912	28.6	1,341	67.9	5,772	125	125.7	
Chi., Milw., St. P. & Pac.....1946	17,017	43,964	60,981	1.5	34,613	2,296	1,065	30.6	907	43.8	5,137	118	102.2	
.....1945	22,902	35,432	58,334	2.1	36,224	2,339	1,096	31.2	881	41.9	4,895	116	96.7	
Chi., St. P., Minneap. & Om.....1946	1,055	8,268	9,323	5.1	23,191	1,902	864	30.2	710	33.0	3,972	115	76.0	
.....1945	1,110	7,132	8,242	6.9	23,458	1,889	906	31.5	774	33.6	3,892	114	72.3	
Duluth, Missabe & Iron Range.....1946	14,104	476	14,580	2.6	85,618	5,099	3,124	57.7	946	32.3	25,626	67	109.7	
.....1945	14,984	413	15,397	3.2	89,081	5,229	3,190	55.6	964	33.9	26,874	66	113.2	
Great Northern.....1946	18,633	25,586	44,219	2.5	43,628	2,975	1,364	33.5	1,221	58.0	7,033	97	97.5	
.....1945	19,994	21,748	41,742	2.6	43,385	2,935	1,340	34.1	1,259	61.1	6,323	93	90.6	
Minneap., St. P. & S. St. M.....1946	4,359	9,640	13,999	4.3	32,939	2,064	1,002	33.3	1,102	49.3	4,026	93	133.9	
.....1945	5,699	9,733	15,432	3.1	33,872	2,058	989	33.9	1,055	48.2	3,931	91	127.5	
Northern Pacific.....1946	14,738	18,884	33											

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